National Electricity Rules Version 30

Historical Information

This version of the National Electricity Rules was current from 1 July 2009 to 31 August 2009.

This coversheet was last updated on 1 July 2009

National Electricity Rules Version 30

Status Information

This is the latest electronically available version of the National Electricity Rules as at 1 July 2009.

This consolidated version of the National Electricity Rules was last updated on 1 July 2009 as a result of the commencement of the following amendments:

National Electricity Amendment (Victorian Jurisdictional Derogation (Advanced Metering Infrastructure Roll Out)) Rule 2009 No. 2

National Electricity Amendment (Demand Management) Rule 2009 No. 11

National Electricity Amendment (EnergyAustralia Participant Derogation Extension (Settlement Residue Auctions)) Rule 2009 No. 14

National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009 No. 15

National Electricity (Australian Energy Market Operator) Amendment Rules 2009

Provisions in force

The provisions displayed in this consolidated version of the Rules have all commenced.

TABLE OF CONTENTS

1. Introduction 2

1.1 Preliminary 2

1.1.1 References to the Rules 2

1.1.2 Italicised expressions 2

1.1.3 [Deleted] 2

1.2 Background 2

1.3 Nomenclature of and references to provisions of a Chapter 2

1.3.1 Introduction 2

1.3.2 Parts, Divisions and Subdivisions 2

1.3.3 Rules, clauses, paragraphs, subparagraphs and other items 3

1.4 Effect of renumbering of provisions of the Rules 4

1.5 [Deleted] 4

1.6 [Deleted] 4

1.7 Interpretation 4

1.7.1 General 4

1.8 Notices 5

1.8.1 Service of notices under the Rules 5

1.8.2 Time of service 6

1.8.3 Counting of days 6

1.8.4 Reference to addressee 6

1.9 Retention of Records and Documents 7

1.10 [Deleted] 7

1.11 AEMO Rule Funds 7

2. Registered Participants and Registration 10

2.1 Registered Participants 10

2.1.1 Purpose 10

2.1.2 General 10

2.2 Generator 10

2.2.1 Registration as a Generator 10

2.2.2 Scheduled Generator 11

2.2.3 Non-Scheduled Generator 12

2.2.4 Market Generator 13

2.2.5 Non-Market Generator 13

2.2.6 Ancillary services generating unit 13

2.2.7 Semi-Scheduled Generator 15

2.3 Customer 16

2.3.1 Registration as a Customer 16

2.3.2 First-Tier Customer 17

2.3.3 Second-Tier Customer 17
2.3.4 Market Customer 18
2.3.5 Ancillary services load 18
2.4 Market Participant 20
2.4.1 Registration as a category of Market Participant 20
2.4.2 Eligibility 20
2.5 Network Service Provider 21
2.5.1 Registration as a Network Service Provider 21
2.5.2 Market Network Service 21
2.5.3 Scheduled Network Service 22
2.5A Trader 23
2.5B Reallocator 24
2.6 Special Participant 24
2.7 Intention to Commence Activities or Functions 25
2.8 Registered Participant Rights and Obligations 25
2.8.1 Rights and obligations 25
2.9 Application to be Registered as a Registered Participant 25
2.9.1 Applications for Registration 25
2.9.2 Registration as a Registered Participant 26
2.9.3 Registration as an Intermediary 26
2.9A Transfer of Registration 28
2.9A.1 Definitions 28
2.9A.2 Applications for Transfer of Registration 28
2.9A.3 Approval for Transfer of Registration 29
2.10 Ceasing to be a Registered Participant 29
2.10.1 Notification of intention 29
2.10.2 Ceasing Participation 30
2.10.3 Liability after cessation 30
2.11 Participant Fees 31
2.11.1 Development of Participant fee structure 31
2.11.2 Payment of Participant fees 33
2.11.3 Budgeted revenue requirements 34
2.12 Interpretation of References to Various Registered Participants 35
2A. Regional Structure 38
2A.1 Introduction to Chapter 2A 38
2A.1.1 Definitions 38
2A.1.2 AEMC determination of regions 38
2A.1.3 Publication of regions by AEMO 38
2A.2 Region change applications 38

2A.2.1 A complete region change application 38
2A.2.2 Identifying a congestion problem 39
2A.2.3 Explanation of economic efficiency of proposed region solution 39
2A.2.4 Region change application must be technically competent 40
2A.2.5 Alternative congestion management options 40
2A.2.6 Previous application relating to congestion problem 41
2A.2.7 AEMO to provide information to intending applicants 41
2A.2.8 AEMC may refuse to accept incomplete applications 42
2A.3 Acceptance of region change application by AEMC 42
2A.3.1 Acceptance of a region change application by AEMC 42
2A.3.2 Preliminary consultation prior to acceptance of a region change application 43
2A.4 First round consultation on region change application 43
2A.4.1 Notice of first round consultation 43
2A.4.2 Right to make written submissions during first round consultation period 44
2A.4.3 Alternative region solution put forward by third parties 44
2A.4.4 Acceptance as a formal alternative region solution by AEMC 45
2A.5 Provision of supplementary economic analysis 45
2A.5.1 AEMC may direct provision of supplementary analysis 45
2A.5.2 AEMC may direct AEMO to provide information 46
2A.6 Region determinations 46
2A.6.1 AEMC powers to make a region determination 46
2A.6.2 Matters for consideration in making region determination 47
2A.7 Draft region determination and second round consultation 48
2A.7.1 Publishing of draft region determination 48
2A.7.2 Second round consultation 48
2A.7.3 Right to make written submissions during second round consultation 48
2A.8 Final region determination 48
2A.8.1 Final determination for region change 48
2A.8.2 Formal publication of region determination 49
2A.9 Miscellaneous matters for region change process 49
2A.9.1 AEMC may extend periods of time specified in Chapter 2A 49
2A.9.2 Consultation meeting in relation to region change application 49
2A.10 Purpose and application of Part B 50
2A.10.1 Purpose of Part B 50
2A.10.2 Application of Part B 50
2A.11 Region Change Implementation Procedure 50
2A.11.1 Submission of draft Region Change Implementation Procedure 50
2A.11.2 Approved Region Change Implementation Procedure 51

2A.12 AEMO region change implementation functions 51
2A.12.1 General implementation functions 51
2A.12.2 Implementation functions referable to published implementation procedure 51
2A.12.3 Amendment of current or subsequent Regions and Loss Factors Publication 51
2A.13 Continuity of regions 52
Schedule 2A.1 Glossary for Chapter 2A 53
3. Market Rules 57
3.1 Introduction to Market Rules 57
3.1.1 Purpose 57
3.1.2 [Deleted] 57
3.1.3 [Deleted] 57
3.1.4 Market design principles 57
3.1.5 Time for undertaking action 59
3.2 AEMO's Market Responsibilities 59
3.2.1 Market functions of AEMO 59
3.2.2 Spot market 60
3.2.3 Power system operations 60
3.2.4 Ancillary services function 61
3.2.5 [Deleted] 61
3.2.6 Settlements 61
3.3 Prudential Requirements 61
3.3.1 Market Participant criteria 61
3.3.2 Credit support 61
3.3.3 Acceptable credit criteria 62
3.3.4 Acceptable credit rating 62
3.3.5 Amount of credit support 62
3.3.6 Changes to credit support 63
3.3.7 Drawings on credit support 63
3.3.8 Maximum credit limit and prudential margin 64
3.3.8A Security Deposits 64
3.3.9 Outstandings 64
3.3.10 Trading limit 65
3.3.11 Call notices 65
3.3.12 Typical accrual 66
3.3.13 Response to Call Notices 67
3.3.13A Application of monies in the security deposit fund 67
3.3.14 Potential value of a transaction 69

3.3.15 Trading margin 69
3.3.16 Limitation on entry of transactions 69
3.3.17 Scheduled prices 69
3.3.18 Additional credit support 70
3.3.19 Consideration of other Market Participant transactions 70
3.4 Spot Market 70
3.4.1 Establishment of spot market 70
3.4.2 Trading day and trading interval 71
3.4.3 Spot market operations timetable 71
3.5 Regions 71
3.5.1 [Deleted] 71
3.5.2 [Deleted] 71
3.5.3 [Deleted] 71
3.5.4 [Deleted] 71
3.5.5 [Deleted] 71
3.5.6 Abolition of Snowy region 71
3.6 Network Losses and Constraints 72
3.6.1 Inter-regional losses 72
3.6.2 Intra-regional losses 74
3.6.2A Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors 77
3.6.3 Distribution losses 78
3.6.4 Network constraints 82
3.6.5 Settlements residue due to network losses and constraints 82
3.7 Projected Assessment of System Adequacy 84
3.7.1 Administration of PASA 84
3.7.2 Medium term PASA 85
3.7.3 Short term PASA 87
3.7A Market Information on planned network outages 90
3.7B Unconstrained intermittent generation forecast 91
3.7C Energy Adequacy Assessment Projection 92
3.8 Central Dispatch and Spot Market Operation 96
3.8.1 Central Dispatch 96
3.8.2 Participation in central dispatch 97
3.8.3 Bid and offer aggregation guidelines 98
3.8.3A Ramp rates 99
3.8.4 Notification of scheduled capacity 101
3.8.5 Submission timing 102
3.8.6 Generating unit offers for dispatch 102

3.8.6A Scheduled network service offers for dispatch 104
3.8.7 Bids for scheduled load 106
3.8.7A Market ancillary services offers 107
3.8.8 Validation of dispatch bids and offers 109
3.8.9 Default offers and bids 109
3.8.10 Network constraints 110
3.8.11 Ancillary services constraints 110
3.8.12 System scheduled reserve constraints 111
3.8.13 Notification of constraints 111
3.8.14 Dispatch under conditions of supply scarcity 111
3.8.15 [Deleted] 112
3.8.16 Equal priced dispatch bids and dispatch offers 112
3.8.17 Self-commitment 112
3.8.18 Self-decommitment 112
3.8.19 Dispatch inflexibilities 113
3.8.20 Pre-dispatch schedule 115
3.8.21 On-line dispatch process 117
3.8.22 Rebidding 118
3.8.22A Variation of offer, bid or rebid 119
3.8.23 Failure to conform to dispatch instructions 120
3.8.24 Scheduling errors 122
3.9 Price Determination 122
3.9.1 Principles applicable to spot price determination 122
3.9.2 Determination of spot prices 124
3.9.2A Determination of ancillary services prices 125
3.9.2B Pricing where AEMO determines a manifestly incorrect input 126
3.9.3 Pricing in the event of intervention by AEMO 127
3.9.3A Reliability standard and reliability settings review 128
3.9.4 Market Price Cap 129
3.9.5 Application of the Market Price Cap 130
3.9.6 Market Floor Price 130
3.9.6A Application of the Market Floor Price 131
3.9.7 Pricing for constrained-on scheduled generating units 131
3.10 [Deleted] 131
3.11 Ancillary Services 131
3.11.1 Introduction 131
3.11.2 Market ancillary services 132
3.11.3 Acquisition of non-market ancillary services 132

3.11.4 Procedure for determining quantities of network control ancillary services 134
3.11.4A Guidelines and objectives for acquisition of system restart ancillary services 134
3.11.4B Determination of electrical sub-network boundaries 136
3.11.5 Tender process for non-market ancillary services 136
3.11.6 Procedures for the dispatch of non-market ancillary services by AEMO 139
3.11.7 Performance and testing 139
3.12 Market Intervention by AEMO 140
3.12.1 Intervention settlement timetable 140
3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention 140
3.12.3 Role of the Independent Expert in calculating payments in relation to intervention by AEMO 144
3.12A Mandatory restrictions 147
3.12A.1 Restriction offers 147
3.12A.2 Mandatory restrictions schedule 148
3.12A.3 Acquisition of capacity 149
3.12A.4 Rebid of capacity under restriction offers 149
3.12A.5 Dispatch of restriction offers 149
3.12A.6 Pricing during a restriction price trading interval 150
3.12A.7 Determination of funding restriction shortfalls 150
3.12A.8 Cancellation of a mandatory restriction period 155
3.12A.9 Review by AEMC 155
3.13 Market Information 155
3.13.1 Provision of information 155
3.13.2 Systems and procedures 156
3.13.3 Standing data 157
3.13.4 Spot market 163
3.13.4A Market ancillary services 167
3.13.5 Ancillary services contracting by AEMO 167
3.13.5A Settlement residue auctions 168
3.13.6 [Deleted] 168
3.13.6A Report by AEMO 168
3.13.7 Monitoring of significant variation between forecast and actual prices by AER 169
3.13.8 Public information 171
3.13.9 [Deleted] 171
3.13.10 Market auditor 171
3.13.11 [Deleted] 172

3.13.12 NMI Standing Data 172
3.13.13 Inter-network tests 175
3.14 Administered Price Cap and Market Suspension 176
3.14.1 Cumulative Price Threshold and Administered Price Cap 176
3.14.2 Application of Administered Price Cap 176
3.14.3 Conditions for suspension of the spot market 177
3.14.4 Declaration of market suspension 178
3.14.5 Pricing during market suspension 179
3.14.6 Compensation due to the application of an administered price, market price cap or market floor price 182
3.15 Settlements 185
3.15.1 Settlements management by AEMO 185
3.15.2 Electronic funds transfer 185
3.15.3 Connection point and virtual transmission node responsibility 185
3.15.4 Adjusted energy amounts - connection points 186
3.15.5 Adjusted energy - transmission network connection points 186
3.15.5A Adjusted energy – virtual transmission nodes 187
3.15.6 Spot market transactions 187
3.15.6A Ancillary service transactions 188
3.15.7 Payment to Directed Participants 196
3.15.7A Payment to Directed Participants for services other than energy and market ancillary services 197
3.15.7B Claim for additional compensation by Directed Participants 200
3.15.8 Funding of Compensation for directions 202
3.15.9 Reserve settlements 204
3.15.10 Administered price, market price cap or market floor price compensation payments 206
3.15.10A Goods and services tax 207
3.15.10B Restriction contract amounts 208
3.15.10C Intervention Settlements 209
3.15.11 Reallocation transactions 212
3.15.11A Reallocation procedures 213
3.15.12 Settlement amount 214
3.15.13 Payment of settlement amount 215
3.15.14 Preliminary statements 215
3.15.15 Final statements 215
3.15.15A Use of estimated settlement amounts by AEMO 215
3.15.16 Payment by market participants 216
3.15.17 Payment to market participants 216

3.15.18 Disputes 216
3.15.19 Revised Statements and Adjustments 216
3.15.20 Payment of adjustments 219
3.15.21 Default procedure 219
3.15.22 Maximum total payment in respect of a billing period 222
3.15.23 Maximum total payment in respect of a financial year 223
3.15.24 Compensation for reductions under clause 3.15.23 224
3.15.25 Interest on overdue amounts 225
3.16 Participant compensation fund 225
3.16.1 Establishment of Participant compensation fund 225
3.16.2 Dispute resolution panel to determine compensation 226
3.17 AEMO Software 227
3.17.1 Acceptance of software 227
3.17.2 [Deleted] 227
3.18 Settlement Residue Auctions 227
3.18.1 Settlement residue concepts 227
3.18.2 Auctions and eligible persons 228
3.18.3 Auction rules 229
3.18.4 Proceeds and fees 230
3.18.5 Settlement residue committee 231
3.19 Market Management Systems Access Procedures 232
3.20 Reliability and Emergency Reserve Trader 233
3.20.1 Expiry of reserve and emergency reliability trader 233
3.20.2 Reliability and emergency reserve trader 233
3.20.3 Reserve contracts 234
3.20.4 Dispatch pricing methodology for unscheduled reserve contracts 235
3.20.5 AEMO's risk management and accounts relating to the reliability safety net 235
3.20.6 Reporting on RERT by AEMO 235
3.20.7 AEMO's exercise of the RERT 236
3.20.8 RERT Guidelines 237
3.20.9 Review of reserve and emergency reliability trader 238
Schedule 3.1 - Registered Bid and Offer Data 239
Scheduled Generating Unit Data: 239
Semi-Scheduled Generating Unit Data: 240
Scheduled Load Data: 240
Scheduled Network Service Data: 240
Dispatch Inflexibility Profile: 241
Aggregation Data: 241

Schedule 3.2 - [Deleted] **241**
Schedule 3.3 - Principles for Determination of Maximum Credit Limits & Prudential Margins **241**
S3.3.1 Principles for determining maximum credit limits 242
S3.3.2 Principles for determining prudential margins 243
4. Power System Security **245**
4.1 Introduction **245**
4.1.1 Purpose 245
4.2 Definitions and Principles **245**
4.2.1 [Deleted] 245
4.2.2 Satisfactory Operating State 245
4.2.3 Credible and non-credible contingency events 246
4.2.3A Re-classifying contingency events 247
4.2.3B Criteria for re-classifying contingency events 248
4.2.4 Secure operating state and power system security 249
4.2.5 Technical envelope 249
4.2.6 General principles for maintaining power system security 250
4.2.7 Reliable Operating State 251
4.2.8 Time for undertaking action 251
4.3 Power System Security Responsibilities and Obligations **251**
4.3.1 Responsibility of AEMO for power system security 251
4.3.2 System security 254
4.3.3 The role of System Operators 256
4.3.4 Network Service Providers 257
4.3.5 Market Customer obligations 258
4.4 Power System Frequency Control **258**
4.4.1 Power system frequency control responsibilities 258
4.4.2 Operational frequency control requirements 259
4.4.3 Generator protection requirements 259
4.5 Control of Power System Voltage **259**
4.5.1 Power system voltage control 259
4.5.2 Reactive power reserve requirements 260
4.5.3 Audit and testing 260
4.6 Protection of Power System Equipment **261**
4.6.1 Power system fault levels 261
4.6.2 Power system protection co-ordination 261
4.6.3 Audit and testing 261
4.6.4 Short-term thermal ratings of power system 261
4.6.5 Partial outage of power protection systems 261

4.7 Power System Stability Co-ordination 262
4.7.1 Stability analysis co-ordination 262
4.7.2 Audit and testing 262
4.8 Power System Security Operations 262
4.8.1 Registered Participants' advice 262
4.8.2 Protection or control system abnormality 263
4.8.3 AEMO's advice on power system emergency conditions 263
4.8.4 Declaration of conditions 263
4.8.5 Managing declarations of conditions 264
4.8.5A Determination of the latest time for AEMO intervention 264
4.8.5B Notifications of last time of AEMO intervention 265
4.8.6 [Deleted] 266
4.8.7 Managing a power system contingency event 266
4.8.8 [Deleted] 266
4.8.9 Power to issue directions and clause 4.8.9 instructions 266
4.8.9A System security directions 268
4.8.10 Disconnection of generating units and market network services 268
4.8.11 [Deleted] 269
4.8.12 System restart plan and local black system procedures 269
4.8.13 [Deleted] 270
4.8.14 Power system restoration 270
4.8.15 Review of operating incidents 270
4.9 Power System Security Related Market Operations 272
4.9.1 Load forecasting 272
4.9.2 Instructions to Scheduled Generators and Semi-Scheduled Generators 273
4.9.2A Dispatch Instructions to Scheduled Network Service Providers 274
4.9.3 Instructions to Registered Participants 275
4.9.3A Ancillary services instructions 275
4.9.3B Compliance with dispatch instructions 276
4.9.4 Dispatch related limitations on Scheduled Generators and Semi-Scheduled Generators 276
4.9.4A Dispatch related limitations on Scheduled Network Service Providers 277
4.9.5 Form of dispatch instructions 277
4.9.6 Commitment of scheduled generating units 278
4.9.7 De-commitment, or output reduction, by Scheduled Generators 279
4.9.8 General responsibilities of Registered Participants 279
4.9.9 Scheduled Generator plant changes 280
4.9.9A Scheduled Network Service Provider plant changes 280
4.9.9B Ancillary service plant changes 280

4.10 Power System Operating Procedures 280
4.10.1 Power system operating procedures 280
4.10.2 Transmission network operations 281
4.10.3 Operating interaction with distribution networks 281
4.10.4 Switching of a Distributor's high voltage networks 282
4.10.5 Switching of reactive power facilities 282
4.10.6 Automatic reclose 282
4.10.7 Inspection of facilities by AEMO 282
4.11 Power System Security Support 283
4.11.1 Remote control and monitoring devices 283
4.11.2 Operational control and indication communication facilities 284
4.11.3 Power system voice/data operational communication facilities 284
4.11.4 Records of power system operational communication 285
4.11.5 Agent communications 285
4.12 Nomenclature Standards 286
4.13 [Deleted] 287
4.14 Acceptance of Performance Standards 287
4.15 Compliance with Performance Standards 288
4.16 Transitioning arrangements for establishment of performance standards 291
4.16.1 Definitions 291
4.16.2 Exclusions 293
4.16.3 Notification and acceptance of performance standards 294
4.16.4 Actual capability 299
4.16.5 Criteria for, and negotiation of, performance standards 300
4.16.6 Consultation with and assistance by Network Service Providers 302
4.16.7 Referral to expert determination 303
4.16.8 Prior actions 304
4.16.9 Deemed performance standards 304
4.16.10 Modification of connection agreements 304
4.17 Expert determination 305
4.17.1 Performance standards committee and appointment of performance standards experts 305
4.17.2 Referral to performance standards expert 306
4.17.3 Determinations of performance standards experts 307
4.17.4 Other matters 308
5. Network Connection 310
5.1 Statement of Purpose 310
5.1.1 [Deleted] 310

5.1.2 Purpose 310
5.1.3 Principles 312
5.2 Obligations 313
5.2.1 Obligations of Registered Participants 313
5.2.2 Connection agreements 313
5.2.3 Obligations of network service providers 314
5.2.4 Obligations of customers 317
5.2.5 Obligations of Generators 318
5.3 Establishing or Modifying Connection 319
5.3.1 Process and procedures 319
5.3.2 Connection enquiry 320
5.3.3 Response to connection enquiry 320
5.3.4 Application for connection 323
5.3.4A Negotiated access standards 324
5.3.5 Preparation of offer to connect 326
5.3.6 Offer to connect 327
5.3.7 Finalisation of connection agreements 328
5.3.7A Application for connection to declared shared network 330
5.3.8 Provision and use of information 330
5.3.9 Procedure to be followed by a Generator proposing to alter a generating system 331
5.3.10 Acceptance of performance standards for generating plant that is altered 333
5.4 Design of Connected Equipment 334
5.4.1 Application 334
5.4.2 Advice of inconsistencies 334
5.4.3 Additional information 334
5.4.4 Advice on possible non-compliance 334
5.4A Access arrangements relating to Transmission Networks 335
5.5 Access arrangements relating to Distribution Networks 338
5.6 Planning and Development of Network 342
5.6.1 Forecasts for connection points to transmission network 342
5.6.2 Network Development 342
5.6.2A Annual Planning Report 346
5.6.3 AEMO's obligation to publish information and guidelines and provide advice 349
5.6.4 Last Resort Planning Power 351
5.6.5 [Deleted] 354
5.6.5A Investments subject to the regulatory test 354
5.6.5B Regulatory investment test for transmission 356

Principles 356
5.6.5C Investments subject to the regulatory investment test for transmission 361
5.6.5D Identification of a credible option 363
5.6.5E Review of Costs Thresholds 364
5.6.6 Regulatory investment test for transmission procedures 365
5.6.6B Construction of Funded Augmentations 375
5.6A National Transmission Planning 376
5.6A.1 Preliminary consultation 376
5.6A.2 Publication of NTNDP 377
5.6A.3 Development strategies for national transmission flow paths 379
5.6A.4 NTNDP database 380
5.6A.5 Jurisdictional planning bodies and jurisdictional planning representatives 380
5.7 Inspection and Testing 381
5.7.1 Right of entry and inspection 381
5.7.2 Right of testing 383
5.7.3 Tests to demonstrate compliance with connection requirements for generators 384
5.7.4 Routine testing of protection equipment 386
5.7.5 Testing by Registered Participants of their own plant requiring changes to normal operation 387
5.7.6 Tests of generating units requiring changes to normal operation 388
5.7.7 Inter-network power system tests 390
5.8 Commissioning 396
5.8.1 Requirement to inspect and test equipment 396
5.8.2 Co-ordination during commissioning 397
5.8.3 Control and protection settings for equipment 397
5.8.4 Commissioning program 398
5.8.5 Commissioning tests 399
5.9 Disconnection and Reconnection 399
5.9.1 Voluntary disconnection 399
5.9.2 Decommissioning procedures 400
5.9.3 Involuntary disconnection 400
5.9.4 Direction to disconnect 401
5.9.4A Notification of disconnection 401
5.9.5 Disconnection during an emergency 401
5.9.6 Obligation to reconnect 402
Schedule 5.1a - System standards 404
S5.1a.1 Purpose 404

S5.1a.2 Frequency 404
S5.1a.3 System stability 404
S5.1a.4 Power frequency voltage 405
S5.1a.5 Voltage fluctuations 406
S5.1a.6 Voltage waveform distortion 406
S5.1a.7 Voltage unbalance 406
S5.1a.8 Fault clearance times 407
Schedule 5.1 - Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers 410
S5.1.1 Introduction 410
S5.1.2 Network reliability 411
S5.1.3 Frequency variations 413
S5.1.4 Magnitude of power frequency voltage 414
S5.1.5 Voltage fluctuations 415
S5.1.6 Voltage harmonic or voltage notching distortion 416
S5.1.7 Voltage unbalance 417
S5.1.8 Stability 418
S5.1.9 Protection systems and fault clearance times 419
S5.1.10 Load and network control facilities 423
S5.1.11 Automatic reclosure of transmission or distribution lines 424
S5.1.12 Rating of transmission lines and equipment 424
S5.1.13 Information to be provided 425
Schedule 5.2 - Conditions for Connection of Generators 426
S5.2.1 Outline of requirements 426
S5.2.2 Application of Settings 427
S5.2.3 Technical matters to be coordinated 427
S5.2.4 Provision of information 429
S5.2.5 Technical requirements 431
S5.2.6 Monitoring and control requirements 461
S5.2.7 Power station auxiliary supplies 464
S5.2.8 Fault current 464
Schedule 5.3 - Conditions for Connection of Customers 467
S5.3.1a Introduction to the schedule 467
S5.3.1 Information 468
S5.3.2 Design standards 469
S5.3.3 Protection systems and settings 469
S5.3.4 Settings of protection and control systems 471
S5.3.5 Power factor requirements 472
S5.3.6 Balancing of load currents 473

S5.3.7 Voltage fluctuations 473
S5.3.8 Harmonics and voltage notching 474
S5.3.9 Design requirements for Network Users' substations 474
S5.3.10 Load shedding facilities 475
Schedule 5.3a - Conditions for connection of Market Network Services 476
S5.3a.1a Introduction to the schedule 476
S5.3a.1 Provision of Information 477
S5.3a.2 Application of settings 478
S5.3a.3 Technical matters to be co-ordinated 479
S5.3a.4 Monitoring and control requirements 480
S5.3a.5 Design standards 481
S5.3a.6 Protection systems and settings 482
S5.3a.7 [Deleted] 483
S5.3a.8 Reactive power capability 483
S5.3a.9 Balancing of load currents 484
S5.3a.10 Voltage fluctuations 484
S5.3a.11 Harmonics and voltage notching 485
S5.3a.12 Design requirements for Market Network Service Providers' substations 485
S5.3a.13 Market network service response to disturbances in the power system 486
S5.3a.14 Protection of market network services from power system disturbances 486
Schedule 5.4 - Information to be Provided with Preliminary Enquiry 488
Schedule 5.5 - Technical Details to Support Application for Connection and Connection Agreement 489
Schedule 5.5.1 - [Deleted] 493
Schedule 5.5.2 - [Deleted] 493
Schedule 5.5.3 - Network and plant technical data of equipment at or near connection point 493
Schedule 5.5.4 - Network Plant and Apparatus Setting Data 496
Schedule 5.5.5 - Load Characteristics at Connection Point 497
Schedule 5.6 - Terms and Conditions of Connection agreements 499
Schedule 5.7 - Annual Forecast Information for Planning Purposes 501
Chapter 6 Economic Regulation of Distribution Services 504
6.1 Introduction to Chapter 6 504
6.1.1 AER's regulatory responsibility 504
6.1.2 Structure of this Chapter 504
6.1.3 Access to direct control services and negotiated distribution services 505
6.1.4 Prohibition of DUOS charges for the export of energy 505
6.2 Classification 506
6.2.1 Classification of distribution services 506

6.2.2 Classification of direct control services as standard control services or alternative control services 507
6.2.3 Term for which classification operates 508
6.2.4 Duty of AER to make distribution determinations 508
6.2.5 Control mechanisms for direct control services 508
6.2.6 Basis of control mechanisms for direct control services 510
6.2.7 Negotiated distribution services 510
6.2.8 Guidelines 510
6.3 Building block determinations 511
6.3.1 Introduction 511
6.3.2 Contents of building block determination 511
6.4 Post-tax revenue model 512
6.4.1 Preparation, publication and amendment of post-tax revenue model 512
6.4.2 Contents of post-tax revenue model 512
6.4.3 Building block approach 512
6.5 Matters relevant to the making of building block determinations 514
6.5.1 Regulatory asset base 514
6.5.2 Return on capital 515
6.5.3 Estimated cost of corporate income tax 517
6.5.4 Review of rate of return 518
6.5.5 Depreciation 520
6.5.6 Forecast operating expenditure 521
6.5.7 Forecast capital expenditure 523
6.5.8 Efficiency benefit sharing scheme 525
6.5.9 The X factor 526
6.6 Adjustments after making of building block determination. 527
6.6.1 Cost pass through 527
6.6.2 Service target performance incentive scheme 530
6.6.3 Demand management incentive scheme 531
6.7 Negotiated distribution services 532
6.7.1 Principles relating to access to negotiated distribution services 532
6.7.2 Determination of terms and conditions of access for negotiated distribution services 534
6.7.3 Negotiating framework determination 535
6.7.4 Negotiated Distribution Service Criteria determination 535
6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services 536
6.7.6 Confidential information 538
6.8 Regulatory proposal 539

6.8.1 AER's framework and approach paper 539
6.8.2 Submission of regulatory proposal 540
6.9 Preliminary examination and consultation 541
6.9.1 Preliminary examination 541
6.9.2 Resubmission of proposal 542
6.9.3 Consultation 542
6.10 Draft distribution determination and further consultation 542
6.10.1 Making of draft distribution determination 542
6.10.2 Publication of draft determination and consultation 542
6.10.3 Submission of revised proposal 543
6.11 Distribution determination 544
6.11.1 Making of distribution determination 544
6.11.2 Notice of distribution determination 544
6.11.3 Commencement of distribution determination 544
6.12 Requirements relating to draft and final distribution determinations 545
6.12.1 Constituent decisions 545
6.12.2 Reasons for decisions 547
6.12.3 Extent of AER's discretion in making distribution determinations 548
6.13 Revocation and substitution of distribution determination for wrong information or error 549
6.14 Miscellaneous 549
6.15 Cost allocation 550
6.15.1 Duty to comply with Cost Allocation Method 550
6.15.2 Cost Allocation Principles 550
6.15.3 Cost Allocation Guidelines 551
6.15.4 Cost Allocation Method 552
6.16 Distribution consultation procedures 553
6.17 Distribution Ring-Fencing Guidelines 555
6.17.1 Compliance with Distribution Ring-Fencing Guidelines 555
6.17.2 Development of Distribution Ring-Fencing Guidelines 555
6.18 Distribution Pricing Rules 556
6.18.1 Application of this Part 556
6.18.2 Pricing proposals 556
6.18.3 Tariff classes 557
6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging 558
6.18.5 Pricing principles 559
6.18.6 Side constraints on tariffs for standard control services 559

6.18.7 Recovery of charges for transmission use of system services 560
6.18.8 Approval of pricing proposal 560
6.18.9 Publication of information about tariffs and tariff classes 561
6.19. Data Required for Distribution Service Pricing 562
6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators 562
6.19.2 Confidentiality of distribution network pricing information 562
6.20 Billing and Settlements Process 562
6.20.1 Billing for distribution services 562
6.20.2 Minimum information to be provided in distribution network service bills565
6.20.3 Settlement between Distribution Network Service Providers 565
6.20.4 Obligation to pay 565
6.21 Distribution Network Service Provider Prudential Requirements 565
6.21.1 Prudential requirements for distribution network service 565
6.21.2 Capital contributions, prepayments and financial guarantees 566
6.21.3 Treatment of past prepayments and capital contributions 567
6.22 Dispute Resolution 567
6.22.1 Dispute Resolution by the AER 567
6.22.2 Determination of dispute 567
6.22.3 Termination of access dispute without access determination 569
6.23 Separate disclosure of transmission and distribution charges 570
6.24 Dual Function Assets 571
6.24.1 Application of this Part 571
6.24.2 Dual Function Assets 571
6.25 AER determination of applicable pricing regime for Dual Function Assets 571
6.26 Division of Distribution Network Service Provider's revenue 573
S6.1.1 Information and matters relating to capital expenditure 575
S6.1.2 Information and matters relating to operating expenditure 576
S6.1.3 Additional information and matters 577
S6.2.1 Establishment of opening regulatory asset base for a regulatory control period 579
S6.2.2 Prudency and efficiency of capital expenditure 583
S6.2.3 Roll forward of regulatory asset base within the same regulatory control period 584
6A. Economic Regulation of Transmission Services 587
6A.1 Introduction to Chapter 6A 587
6A.1.1 Economic regulation of transmission services generally 587
6A.1.2 Meaning of terms and conditions of access for transmission services 588

6A.1.3 Access to prescribed and negotiated transmission services 588
6A.1.4 National regulatory arrangements 589
6A.1.5 Application of Chapter 6A to Market Network Service Providers 589
6A.1.6 Application of Chapter 6A to AEMO and declared transmission system operators 590
6A.2 Transmission determinations 590
6A.2.1 Duty of *AER* to make transmission determinations 590
6A.2.2 Components of transmission determinations 590
6A.3 Allowed revenue from prescribed transmission services 591
6A.3.1 Allowed revenue for regulatory year 591
6A.3.2 Adjustment of maximum allowed revenue 591
6A.4 Revenue determinations 591
6A.4.1 Introduction 591
6A.4.2 Contents of revenue determination 592
6A.5 Post-tax revenue model 593
6A.5.1 Introduction 593
6A.5.2 Preparation, publication and amendment of post-tax revenue model 593
6A.5.3 Contents of post-tax revenue model 593
6A.5.4 Building blocks approach 594
6A.6 Matters relevant to the making of revenue determinations 595
6A.6.1 Regulatory asset base 595
6A.6.2 Return on capital 597
6A.6.3 Depreciation 600
6A.6.4 Estimated cost of corporate income tax 601
6A.6.5 Efficiency benefit sharing scheme 603
6A.6.6 Forecast operating expenditure 604
6A.6.7 Forecast capital expenditure 607
6A.6.8 The X factor 611
6A.7 Matters relevant to the adjustment of revenue cap after making of revenue determination 612
6A.7.1 Reopening of revenue determination for capital expenditure 612
6A.7.2 Network support pass through 614
6A.7.3 Cost pass through 616
6A.7.4 Service target performance incentive scheme 619
6A.8 Contingent Projects 621
6A.8.1 Acceptance of a Contingent Project in a revenue determination 621
6A.8.2 Amendment of revenue determination for contingent project 622
6A.9 Negotiated transmission services 626
6A.9.1 Principles relating to access to negotiated transmission services 626

6A.9.2 Determination of terms and conditions of access for negotiated transmission services 628
6A.9.3 Negotiating framework determination 628
6A.9.4 Negotiated transmission criteria determination 629
6A.9.5 Preparation of and requirements for negotiating framework 629
6A.9.6 Confidential information 631
6A.9.7 Commercial arbitration for negotiated transmission services 631
6A.10 Revenue Proposal, proposed negotiating framework and proposed pricing methodology 632
6A.10.1 Submission of proposal, framework, pricing methodology and information 632
6A.10.2 Submission guidelines 633
6A.11 Preliminary examination and consultation 635
6A.11.1 Preliminary examination and determination of non-compliance with relevant requirements 635
6A.11.2 Resubmission of proposal, framework, pricing methodology or information 636
6A.11.3 Resubmission of proposal, framework, pricing methodology or information 636
6A.12 Draft decision and further consultation 637
6A.12.1 Making of draft decision 637
6A.12.2 Publication of draft decision and consultation 637
6A.12.3 Submission of revised proposal, framework or pricing methodology 638
6A.13 Final decision 639
6A.13.1 Making of final decision 639
6A.13.2 Refusal to approve amounts, values, framework or pricing methodology639
6A.13.3 Notice of final decision 640
6A.13.4 Making of transmission determination 641
6A.14 Requirements relating to draft and final decisions 641
6A.14.1 Contents of decisions 641
6A.14.2 Reasons for decisions 643
6A.14.3 Circumstances in which matters must be approved or accepted 643
6A.15 Revocation of revenue determination or amendment of pricing methodology for wrong information or error 646
6A.16 Miscellaneous 647
6A.17 Information disclosure by Transmission Network Service Providers 648
6A.17.1 Information to be provided to AER 648
6A.17.2 Information Guidelines 649
6A.18 [Deleted] 650

6A.19 Cost allocation 651
6A.19.1 Duty to comply with Cost Allocation Methodology 651
6A.19.2 Cost Allocation Principles 651
6A.19.3 Cost Allocation Guidelines 652
6A.19.4 Cost Allocation Methodology 653
6A.20 Transmission consultation procedures 654
6A.21 Transmission Ring-Fencing Guidelines 656
6A.21.1 Compliance with Transmission Ring-Fencing Guidelines 656
6A.21.2 Development of Transmission Ring-Fencing Guidelines 656
6A.22 Terms used in Part J 657
6A.22.1 Aggregate annual revenue requirement (AARR) 657
6A.22.2 Annual service revenue requirement (ASRR) 658
6A.22.3 Meaning of attributable cost share 658
6A.22.4 Meaning of attributable connection point cost share 658
6A.23 Pricing Principles for Prescribed Transmission Services 659
6A.23.1 Introduction 659
6A.23.2 Principles for the allocation of the AARR to categories of prescribed transmission services 659
6A.23.3 Principles for the allocation of the ASRR to transmission network connection points 660
6A.23.4 Price structure principles 661
6A.24 Pricing methodology 663
6A.24.1 Pricing methodologies generally 663
6A.24.2 Publication of pricing methodology and transmission network prices 664
6A.24.3 Basis for setting prices pending approval of pricing methodology 664
6A.24.4 Basis for setting prices pending approval of maximum allowed revenue 665
6A.25 Pricing methodology guidelines for prescribed transmission services 666
6A.25.1 Making and amending of pricing methodology guidelines 666
6A.25.2 Contents of pricing methodology guidelines 666
6A.26 Prudent discounts 667
6A.26.1 Agreements for prudent discounts for prescribed transmission services667
6A.26.2 Application to AER for approval of proposed prudent discount amounts668
6A.27 Billing Process 670
6A.27.1 Billing for prescribed transmission services 670
6A.27.2 Minimum information to be provided in network service bills 670
6A.27.3 Obligation to pay charges for prescribed transmission services 671
6A.27.4 Payments between Transmission Network Service Providers 671

6A.27.5 Calculation of financial transfers between Transmission Network Service Providers 671
6A.28 Prudential Requirements 672
6A.28.1 Prudential Requirements for prescribed transmission services 672
6A.28.2 Capital contribution or prepayment for a specific asset 672
6A.28.3 Treatment of past capital contributions 672
6A.29 Multiple Transmission Network Service Providers 673
6A.29.1 Multiple Transmission Network Service Providers within a region 673
6A.29.2 Single Transmission Network Service Provider within a region 673
6A.29.3 Allocation over several regions 674
6A.30 Commercial arbitration for prescribed and negotiated transmission services 674
6A.30.1 Notification of transmission services dispute 674
6A.30.2 Appointment of commercial arbitrator 674
6A.30.3 Procedures of commercial arbitrator 675
6A.30.4 Powers of commercial arbitrator in determining transmission services access disputes 676
6A.30.5 Determination of transmission services access disputes 677
6A.30.5 Costs of dispute 678
6A.30.6 Enforcement of agreement or determination and requirement for reasons679
6A.30.7 Miscellaneous 679
Schedule 6A.1 - Contents of Revenue Proposals 679
S6A.1.1 Information and matters relating to capital expenditure 679
S6A.1.2 Information and matters relating to operating expenditure 680
S6A.1.3 Additional information and matters 681
Schedule 6A.2 - Regulatory Asset Base 684
S6A.2.1 Establishment of opening regulatory asset base for a regulatory control period 684
S6A.2.2 Prudency and efficiency of capital expenditure 689
S6A.2.3 Removal of assets from regulatory asset base 689
S6A.2.4 Roll forward of regulatory asset base within the same regulatory control period 691
Schedule 6A.3 – CRNP methodology and modified CRNP methodology 692
S6A.3.1 Meaning of optimised replacement cost 692
S6A.3.2 CRNP methodology 692
S6A.3.3 Modified CRNP methodology 693
Schedule 6A.4─Application of this Chapter to AEMO and declared transmission system operators 693
S6A.4.1 Application of this Chapter to AEMO etc 693

S6A.4.2 Exclusions, qualifications and modifications 694
7. Metering 703
7.1 Introduction to the Metering Chapter 703
7.1.1 Purpose 703
7.1.2 Obligations of Market Participants to establish metering installations 703
7.2 Responsibility for Metering Installation 704
7.2.1 Responsible person 704
7.2.2 Responsibility of the Market Participant 704
7.2.3 Responsibility of the Local Network Service Provider 704
7.2.4 Joint metering installations 706
7.2.5 Role of the responsible person 706
7.2.6 [Deleted] 708
7.2.7 Registration of metering installations 708
7.2.8 Market Settlement and Transfer Solution Procedures 708
7.2A.1 B2B e-Hub 709
7.2A.2 Information Exchange Committee 709
7.2A.3 Method of making and changing B2B Procedures 713
7.2A.4 Content of the B2B Procedures 716
7.2A.5 Transition of B2B Communications from the Market Settlement and Transfer Solution Procedures 717
7.2A.6 Cost Recovery 718
7.3 Metering Installation Arrangements 719
7.3.1A Metering Installation Requirements 719
7.3.1 Metering installation components 719
7.3.2 Connection and metering point 723
7.3.3 Use of metering data 723
7.3.4 Metering installation types and accuracy 723
7.3.5 Data collection system 725
7.3.6 Payment for metering 725
7.4 Metering Providers 727
7.4.1 Responsibility 727
7.4.2 Qualifications and registration of Metering Providers 727
7.4.3 Deregistration of Metering Providers 728
7.5 Register of Metering Information 729
7.5.1 Metering register 729
7.5.2 Metering register discrepancy 729
7.6 Inspection, Testing and Audit of Metering Installations 729
7.6.1 Responsibility for testing 729
7.6.2 Actions in event of non-compliance 731

7.6.3 Audits of metering data 732
7.6.4 Retention of test records and documents 732
7.7 Entitlement to metering data 733
7.8 Security of Metering Installations and Data 735
7.8.1 Security of metering installations 735
7.8.2 Security controls 736
7.8.3 Changes to metering equipment, parameters and settings 736
7.8.4 Changes to metering data 737
7.9 Processing of Metering Data for Settlements Purposes 737
7.9.1 Metering databases 737
7.9.2 Remote acquisition of data 738
7.9.3 Periodic energy metering 739
7.9.4 Data validation, substitution and estimation 739
7.9.5 Errors found in metering tests, inspections or audits 740
7.10 Confidentiality 740
7.11 Performance of Metering Installation 740
7.11.1 Metering data 740
7.11.2 Metering installation malfunctions 741
7.12 Time settings 742
7.13 Evolving Technologies and Processes and Development of the Market 742
7.14 Metrology procedure 744
7.14.1 Requirements of the metrology procedure 744
7.14.2 Jurisdictional metrology material in metrology procedure 745
7.14.3 Additional matters 747
7.14.4 Amendment of the metrology procedure 748
7.15 Miscellaneous 749
Schedule 7.1 - Responsibility for Metering 750
Schedule 7.2 - Types and Accuracy of Metering Installations 751
S7.2.1 General requirements 751
S7.2.2 Metering installations commissioned prior to 13 December 1998 751
S7.2.3 Accuracy requirements for metering installations 752
S7.2.4. Check metering 758
S7.2.5. Resolution and accuracy of displayed or captured data 758
S7.2.6. General design standards 759
Schedule 7.3 - Inspection and Testing Requirements 761
S7.3.1. General 761
S7.3.2. Technical Guidelines 763
Schedule 7.4 - Metering Provider 765

S7.4.1 General 765
S7.4.2 Categories of registration 765
S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4 766
S7.4.4 Capabilities of Metering Providers for metering installations types 5, 6 and 7 769
S7.4.5 Capabilities of the Accredited Service Provider category 769
Schedule 7.5 - Metering Register 770
S7.5.1. General 770
S7.5.2. Metering register information 770
8. Administrative Functions 774
8.1 Administrative functions 774
8.1.1 [Deleted] 774
8.1.2 [Deleted] 774
8.2 Dispute Resolution 775
8.2.1 Application and guiding principles 775
8.2.2 The Dispute Resolution Adviser 778
8.2.3 Dispute management systems of Registered Participants and AEMO 779
8.2.4 Stage 1 - dispute resolution through Registered Participants' DMS 779
8.2.5 Stage 2 - dispute resolution process 782
8.2.6A Establishment of Dispute Resolution Panel 783
8.2.6B Parties to DRP Proceedings 784
8.2.6C Proceedings of the DRP 785
8.2.6D Decisions of the DRP 786
8.2.6 [Deleted] 787
8.2.7 Legal representation 787
8.2.8 Cost of dispute resolution 787
8.2.9 Effect of resolution 787
8.2.10 Recording and publication 788
8.2.11 Appeals on questions of law 788
8.2.12 [Deleted] 788
8.2A B2B Determination Disputes 788
8.2A.1 Application of rule 8.2 788
8.2A.2 How rule 8.2 applies 788
8.3 [Deleted] 791
8.4 [Deleted] 791
8.5 [Deleted] 791
8.6 Confidentiality 792
8.6.1 Confidentiality 792

8.6.2 Exceptions 793
8.6.3 Conditions 794
8.6.4 [Deleted] 794
8.6.5 Indemnity to AER, AEMC and AEMO 794
8.6.6 AEMO information 795
8.6.7 Information on Rules Bodies 795
Part D Monitoring and reporting 795
8.7 Monitoring and Reporting 795
8.7.1 Monitoring 795
8.7.2 Reporting requirements and monitoring standards for Registered Participants and AEMO 796
8.7.3 Consultation required for making general regulatory information order (Section 28H of the NEL) 798
8.7.4 Preparation of network service provider performance report (Section 28V of the NEL) 799
8.7.5 [Deleted] 800
8.7.6 Recovery of reporting costs 800
Part E Reliability panel 800
8.8 Reliability Panel 800
8.8.1 Purpose of Reliability Panel 800
8.8.2 Constitution of the Reliability Panel 802
8.8.3 Reliability review process 804
Part F Rules consultation procedures 806
8.9 Rules Consultation Procedures 806
Part G Consumer Advocacy Panel 809
8A. Participant Derogations 820
Part 1 – Derogations Granted to TransGrid 821
8A.1 Derogation for the Treatment of Contingent Projects under Revenue Determination 821
8A.1.1 Expiry date 821
8A.1.2 Definitions 821
8A.1.3 Treatment of contingent projects 821
Part 2 - Derogations Granted to EnergyAustralia 823
8A.2 Derogation from clause 3.18.2(g)(2) - Auctions and eligible persons 823
8A.2.1 Definitions 823
8A.2.2 Expiry date 823
8A.2.3 Derogation 823
8A.2A Derogation from inspection and testing of metering installations 824

8A.2A.1 Definitions 824
8A.2A.2 Derogation 824
Part 3 [Deleted] 826
Part 4 [Deleted] 827
Part 5 [Deleted] 828
Part 6 - Derogations Granted to Victorian Market Participants 829
[Deleted] 829
Part 7 - [Deleted] 830
Part 8 [Deleted] 831
Part 9 [Deleted] 832
Part 10 [Deleted] 833
Part 11 - [Deleted] 834
Part 12 - Ancillary Services Provisions 835
1. Transitional Arrangements 835
Part 13 - Derogation granted to Aurora Energy (Tamar Valley) Pty Ltd 836
8A.13 Derogation from clause S5.2.5.3 – Generating unit response to frequency disturbances 836
8A.13.1 Definitions 836
8A.13.2 Expiry date 836
8A.13.3 Derogation 836
9. Jurisdictional Derogations and Transitional Arrangements 839
9.1 Purpose and Application 839
9.1.1 Purpose 839
9.1.2 Jurisdictional Derogations 839
9.2 [Deleted] 840
9.3 Definitions 840
9.3.1 General Definitions 840
9.3.2 [Deleted] 841
9.3A Fault levels 841
9.4 Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks 842
9.4.1 [Deleted] 842
9.4.2 Smelter Trader 842
9.4.3 Smelter Trader: compliance 843
9.4.4 Report from AER 846
9.4.5 Cross Border Networks 846
9.5 [Deleted] 847
9.6 Transitional Arrangements for Chapter 4 - System Security 847
9.6.1 Operating Procedures (clause 4.10.1) 847
9.6.2 Nomenclature Standards (clause 4.12) 847

9.7 Transitional Arrangements for Chapter 5 - Network Connection 847
9.7.1 [Deleted] 847
9.7.2 [Deleted] 847
9.7.3 [Deleted] 847
9.7.4 Regulation of Distribution Network Connection 847
9.7.5 [Deleted] 849
9.7.6 [Deleted] 849
9.7.7 [Deleted] 849
9.8 Transitional Arrangements for Chapter 6 - Network Pricing 849
9.8.1 [Deleted] 849
9.8.2 [Deleted] 849
9.8.3 [Deleted] 849
9.8.4 Transmission Network Pricing 849
9.8.4A [Deleted] 850
9.8.4B [Deleted] 850
9.8.4C [Deleted] 850
9.8.4D [Deleted] 850
9.8.4E [Deleted] 850
9.8.4F [Deleted] 850
9.8.4G [Deleted] 850
9.8.5 Distribution Network Pricing – Victorian Jurisdictional Regulator 850
9.8.6 [Deleted] 850
9.8.7 Distribution network pricing – transitional application of former Chapter 6 850
9.8.8 Exclusion of AER's power to aggregate distribution systems and parts of distribution systems 852
9.9 Transitional Arrangements for Chapter 7 - Metering 852
9.9.1 Metering Installations To Which This Schedule Applies 852
9.9.2 [Deleted] 853
9.9.3 [Deleted] 853
9.9.4 [Deleted] 853
9.9.5 [Deleted] 853
9.9.6 [Deleted] 853
9.9.7 [Deleted] 853
9.9.8 [Deleted] 853
9.9.9 Periodic Energy Metering (clause 7.9.3) 853
9.9.10 Use of Alternate Technologies (clause 7.13) 853
9.9A [Deleted] 853

Schedule 9A1.1 – [Deleted] **857**
Schedule 9A1.2 – [Deleted] **857**
Schedule 9A1.3 – [Deleted] **857**
Schedule 9A2 – [Deleted] **857**
Schedule 9A3 – Jurisdictional Derogations Granted to Generators **858**
1. Interpretation of tables 858
2. Continuing effect 858
3. Subsequent agreement 858
4. Additional services that may be required (clause S5.2.2 of schedule 5.2) 859
5. Reactive Power Capability (clause S5.2.5.1 of schedule 5.2) 859
6. Generating unit response to disturbances (clauses S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2) 861
7. Partial load rejection (clause S5.2.5.7 of schedule 5.2) 862
8. [Deleted] 864
9. [Deleted] 864
10. Protection systems that impact on system security (clause S5.2.5.9 of schedule 5.2) 864
11. Asynchronous operation (clause S5.2.5.10 of schedule 5.2) 866
12. [Deleted] 866
13. Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2) 866
14. Governor control equipment (clause S5.2.5.11 of schedule 5.2) 866
15. Reactive current compensation (clause S5.2.5.13 schedule 5.2) 868
16. Excitation Control System (clause S5.2.5.13 of schedule 5.2) 868

9.10 [Deleted] **869**
9.11 Definitions **869**
9.11.1 Definitions used in this Part B 869
9.12 Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks **871**
9.12.1 Registration as a Generator 871
9.12.2 Customers 871
9.12.3 Power Traders 872
9.12.4 Cross Border Networks 875
9.13 [Deleted] **875**
9.14 Transitional Arrangements for Chapter 4 - System Security **875**
9.14.1 Power System Operating Procedures 875
9.15 Transitional Arrangements for Chapter 5 - Network Connection **875**
9.15.1 [Deleted] 875
9.15.2 Disputes Relating to a NSW Distribution Network 875

9.16 Transitional Arrangements for Chapter 6 - Network Pricing 877
9.16.1 [Deleted] 877
9.16.2 [Deleted] 877
9.16.3 Jurisdictional Regulator 877
9.16.4 Deemed Regulated Interconnector 877
9.16.5 Revenue Cap 877
9.17 Transitional Arrangements for Chapter 7 - Metering 879
9.17.1 Extent of Derogations 879
9.17.2 Initial Registration (clause 7.1.2) 879
9.17.3 Amendments to Schedule 9G1 879
9.17.4 Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4) 880
9.17A [Deleted] 880
9.18 [Deleted] 880
9.19 [Deleted] 881
9.20 Definitions and Transitional Arrangements for Cross-Border Networks 881
9.20.1 Definitions 881
9.20.2 Cross Border Networks 881
9.21 [Deleted] 882
9.22 [Deleted] 882
9.23 Transitional Arrangements for Chapter 6 - Network Pricing 882
9.23.1 [Deleted] 882
9.23.2 [Deleted] 882
9.23.3 [Deleted 882
9.23.4 [Deleted] 882
9.24 Transitional Arrangements 882
9.24.1 Chapter 7 - Metering 882
9.24.2 [Deleted] 882
9.24A [Deleted] 882
9.25 Definitions 883
9.25.1 [Deleted] 883
9.25.2 Definitions 883
9.26 Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks 886
9.26.1 Registration as a Generator 886
9.26.2 Registration as a Customer 887
9.26.3 Cross Border Networks 887
9.26.4 [Deleted] 887
9.26.5 Registration as a Network Service Provider 887

9.27 [Deleted] 888
9.28 Transitional Arrangements for Chapter 5 - Network Connection 888
9.28.1 Application of clause 5.2 888
9.28.2 Regulation of Distribution Network Connection 889
9.28.3 [Deleted] 890
9.29 Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services 890
9.29.1 Jurisdictional Regulator 890
9.29.2 [Deleted] 890
9.29.3 [Deleted] 890
9.29.4 [Deleted] 890
9.29.5 Distribution Network Pricing – South Australia 890
9.29.6 Capital contributions, prepayments and financial guarantees 892
9.29.7 Ring fencing 892
9.29A Monitoring and reporting 892
9.30 Transitional Provisions 893
9.30.1 Chapter 7 - Metering 893
9.30.2 Participant fees related to additional advisory functions 894
Schedule 9D1 - [Deleted] 894
9.31 [Deleted] 895
9.32 Definitions and Interpretation 895
9.32.1 Definitions 895
9.32.2 Interpretation 897
9.33 Transitional Arrangements for Chapter 1 897
9.33.1 [Deleted] 897
9.34 Transitional Arrangements for Chapter 2 - Registered Participants and Registration 897
9.34.1 Application of the Rules in Queensland (clauses 2.2 and 2.5) 897
9.34.2 Stanwell Cross Border Leases (clause 2.2) 898
9.34.3 [Deleted] 898
9.34.4 Registration as a Customer (clause 2.3.1) 898
9.34.5 There is no clause 9.34.5 899
9.34.6 Exempted generation agreements (clause 2.2) 899
9.35 [Deleted] 904
9.36 [Deleted] 904
9.37 Transitional Arrangements for Chapter 5 - Network Connection 904
9.37.1 [Deleted] 904
9.37.2 Existing connection and access agreements (clause 5.2) 904

9.37.3 [Deleted] 905
9.37.4 Regulation of distribution network connection (clause 5.3) 905
9.37.5 Forecasts for connection points to transmission network (clause 5.6.1) 905
9.37.6 There is no clause 9.37.6 906
9.37.7 Cross Border Networks 906
9.37.8 [Deleted] 906
9.37.9 Credible contingency events (clause S5.1.2.1 of schedule 5.1) 906
9.37.10 Reactive power capability (clause S5.2.5.1 of schedule 5.2) 906
9.37.11 [Deleted] 907
9.37.12 Voltage fluctuations (clause S5.1.5 of schedule 5.1) 907
9.37.13 [Deleted] 910
9.37.14 [Deleted] 910
9.37.15 [Deleted] 910
9.37.16 [Deleted] 910
9.37.17 [Deleted] 910
9.37.18 [Deleted] 910
9.37.19 Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2) 910
9.37.20 [Deleted] 910
9.37.21 Excitation control system (clause S.5.2.5.13 of schedule 5.2) 910
9.37.22 [Deleted] 911
9.37.23 Annual forecast information for planning purposes (schedule 5.7) 911
9.38 Transitional Arrangements for Chapter 6 - Network Pricing 911
9.38.1 [Deleted] 911
9.38.2 [Deleted] 911
9.38.3 Arrangements for regulation of distribution pricing 911
9.38.4 Interconnectors between regions 912
9.38.5 Transmission pricing for exempted generation agreements 912
9.39 Transitional Arrangements for Chapter 7 - Metering 913
9.39.1 Metering installations to which this clause applies 913
9.39.2 [Deleted] 913
9.39.3 [Deleted] 913
9.39.4 [Deleted] 913
9.39.5 [Deleted] 913
9.40 Transitional Arrangements for Chapter 8 - Administration Functions 913
9.40.1 [Deleted] 913
9.40.2 [Deleted] 913
9.40.3 [Deleted] 913

9.41 [Deleted] 913
Schedule 9E1 - Exempted Generation Agreements 914
9.41A [Deleted] 916
9.42 Definitions and interpretation 916
9.42.1 Definitions 916
9.42.2 Interpretation 919
9.42.3 National grid, power system and related expressions 919
9.43 Transitional arrangements for Chapter 1 - Introduction - Validity of certain actions taken prior to Transition Date 919
9.44 Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e)) 920
9.45 Transitional arrangements for Chapter 3 - Market Rules 920
9.45.1 Tasmanian Region (clause 3.5) 920
9.45.2 Administered Price Cap (clause 3.14.1) 920
9.45.3 Settlement Residue Auctions (clause 3.18.1) 920
9.46 Transitional arrangements for Chapter 4 - Power System Security 921
9.46.1 Satisfactory Operating State (clause 4.2.2) 921
9.46.2 Secure operating state and power system security (clause 4.2.6(c)) 921
9.46.3 Market Customer obligations (clause 4.3.5(b)) 921
9.46.4 Power System Frequency Control Responsibilities (clause 4.4.1) 921
9.47 Transitional arrangements for Chapter 5- Network Connection 922
9.47.1 Existing Connection Agreements 922
9.47.2 [Deleted] 922
9.47.3 Frequency variations (clauses S5.1.3 and S5.1.10) 922
9.47.4 Fault clearance times (clauses S5.1.9 and S5.1a.8 and table S5.1a.2) 922
9.48 Transitional arrangements for Chapter 6 - Transmission and Distribution Pricing 923
9.48.1 [Deleted] 923
9.48.2 Transmission Service Pricing 923
9.48.3 Distribution Service Pricing – Jurisdictional Regulator 924
9.48.4 Distribution Service Pricing 925
9.48.4A Ring fencing 925
9.48.4B Uniformity of tariffs for small customers 925
9.48.5 Transmission network 925
9.48.6 Deemed regulated interconnector 926
9.49 Transitional arrangements for Chapter 8 - Administrative Functions 926

9.49.1 Frequency Standards (clause 8.8.1) 926
9.49.2 Termination of frequency derogations 926
9.49.3 Reliability Panel 926
9.49.4 Principles to be applied by Reliability Panel 927
Schedule 9G1 - Metering Transitional Arrangements 928
1. Introduction 928
2. [Deleted] 928
3. General Principle 928
4. [Deleted] 928
5. Accuracy Requirements 928
5.1 Existing Metering Installations Transitional Exemptions 928
5.2 [Deleted] 929
6. [Deleted] 929
7. [Deleted] 929
8. [Deleted] 929
9. [Deleted] 929
10. [Deleted] 929
10. GLOSSARY 931
11. Savings and Transitional Rules 1034
11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 and on the making of the National Electricity Amendment (Negative Settlements Residue Recovery, Extension of Sunset) Rule 2009 1034
11.1.1 Recovery of accrued negative settlements residue 1034
11.1.2 Recovery of interest costs associated with accrued negative settlements residue 1034
11.2 Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006 No.6 1035
11.2.1 Transitional provision for acquisition of non-market ancillary services 1035
11.3 [Deleted] 1036
11.4 Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006 1036
11.4.1 Continuation of things done under old clause 5.6.6 1036
11.5 Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006 1037
11.5.1 Definitions 1037
11.5.2 Metrology procedures continues to apply until 31 December 2006 1037
11.5.3 Responsible person 1037

11.5.4 AEMO's responsibility to develop a metrology procedure 1037
11.5.5 Jurisdictional metrology material in the metrology procedure 1038
11.6 Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006 1039
11.6.1 Definitions 1039
11.6.2 New Chapter 6A does not affect existing revenue determinations 1040
11.6.3 Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6 1041
11.6.4 Old Part F of Chapter 6 1041
11.6.5 Application of new Chapter 6A to Transmission Network Service Providers 1041
11.6.6 Application of Chapter 6 to old distribution matters 1041
11.6.7 References to the old Chapter 6 1042
11.6.8 References to provisions of the old Chapter 6 1042
11.6.9 Roll forward of regulatory asset base for first regulatory control period 1042
11.6.10 Other adjustment carry-over mechanisms from current to first regulatory control period 1042
11.6.11 Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services 1042
11.6.12 Powerlink transitional provisions 1046
11.6.13 ElectraNet easements transitional provisions 1049
11.6.14 TransGrid contingent projects 1050
11.6.15 Transmission determination includes existing revenue determinations 1050
11.6.16 References to regulatory control period 1051
11.6.17 Consultation procedure for first proposed guidelines 1051
11.6.18 Reliance on proposed guidelines for SP AusNet, VENCorp and ElectraNet 1051
11.6.19 EnergyAustralia transitional provisions 1052
11.6.20 Basslink transitional provisions 1054
11.6.21 SPI Powernet savings and transitional provision 1056
11.6.22 Interim arrangements pricing-related information 1058
11.7 Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19 1058
11.7.1 Definitions 1058
11.7.2 Amending Rule does not affect old clause 5.6.5A 1059
11.8 Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 1059
11.8.1 Definitions 1059

11.8.2 Regulated interconnectors 1060
11.8.3 Application of new Part J of Chapter 6A to Transmission Network Service Providers 1060
11.8.4 Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp 1061
11.8.5 Prudent discounts under existing agreements 1061
11.8.6 Application of prudent discounts regime under rule 6A.26 1061
11.8.7 Prudent discounts pending approval of pricing methodology 1061
11.9 Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007 1063
11.9.1 Definitions 1063
11.9.2 Existing and transitional reallocations 1063
11.10 Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007 1064
11.10.1 Definitions 1064
11.10.2 Provision of information under S5.2.4 in registration application 1064
11.10.3 Access standards made under the old Chapter 5 1065
11.10.4 Modifications to plant by Generators 1065
11.10.5 Technical Details to Support Application for Connection and Connection Agreement 1065
11.10.6 Transitional arrangements for establishment of performance standards 1066
11.10.7 Jurisdictional Derogations for Queensland 1066
11.10A Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008 1066
11.10A.1 Definitions 1066
11.10A.2 Registration and reclassification of classified generating units 1067
11.10A.3 Registered generating unit 1067
11.10A.4 Classification of potential semi-scheduled generating unit 1068
11.10A.5 Participant fees 1068
11.10A.6 Timetable 1069
11.10A.7 Procedure for contribution factors for ancillary service transactions 1069
11.10A.8 Guidelines for energy conversion model information 1069
11.11 Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007 1069
11.11.1 Definitions 1069
11.11.2 Action taken by AEMO for the purposes of Amending Rule 1070

11.12 Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007 1070
11.12.1 Definitions 1070
11.12.2 Action taken by AEMO for the purposes of Amending Rule 1070
11.13 Rules consequent on making the National Electricity Amendment (Abolition of Snowy Region) Rule 2007 1071
11.13.1 Definitions 1071
11.13.2 Purpose of rule 11.13 1072
11.13.3 Application of rule 11.13 1072
11.13.4 Implementation period 1072
11.13.5 Publishing of implementation plan by AEMO 1072
11.13.6 AEMO implementation functions 1072
11.13.7 Software modifications to implement abolition of Snowy region 1073
11.13.8 Allocation of transmission connection points as a result of abolition of Snowy region 1073
11.13.9 Location of region boundaries 1074
11.13.10 2008/09 Regions Publication and Loss Factors Publication 1075
11.13.11 Reserve margin calculations 1075
11.13.12 Re-calculation of network constraints and transmission loss factors 1075
11.13.13 Transition of settlements residue auction arrangements 1076
11.13.14 Continuity of regions 1077
Division 1 General Provisions 1077
11.14 General provisions 1077
11.14.1 Application of this Division 1077
11.14.2 Definitions 1077
11.14.3 Preservation of old regulatory regime 1078
11.14.4 Transfer of regulatory responsibility 1079
11.14.5 Special requirements with regard to ring fencing 1080
11.14.6 Additional requirements with regard to cost allocation 1081
11.14.7 Construction of documents 1081
Division 2 Special provisions applying to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014 1081
11.15 Special provisions applying to New South Wales and the Australian Capital Territory 1081
11.15.1 Regulatory control period 2009-2014 for NSW and ACT 1081
11.15.2 Application of Chapter 6 to NSW and ACT for regulatory control period 2009-2014 1081

Division 3 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers 1082
11.16 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers 1082
11.16.1 Definitions 1082
11.16.2 Application of Part to Queensland 2010 distribution determinations 1083
11.16.3 Treatment of the regulatory asset base 1083
11.16.4 Efficiency Benefit Sharing Scheme 1083
11.16.5 Service Target Performance Incentive Scheme 1084
11.16.6 Framework and approach 1084
11.16.7 Regulatory Proposal 1084
11.16.8 Side constraints 1085
11.16.9 Cost pass throughs 1085
11.16.10 Capital Contributions Policy 1085
Division 4 – Transitional provisions of specific application to Victoria 1086
11.17 Transitional provisions of specific application to Victoria 1086
11.17.1 Definitions 1086
11.17.2 Calculation of estimated cost of corporate income tax 1086
11.17.3 Decisions made in the absence of a statement of regulatory intent 1087
11.17.4 Cost allocation guidelines 1087
11.17.5 Modification of requirements related to cost allocation method 1087
11.17.6 AMI Order in Council 1088
11.18 Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007 1089
11.18.1 Definitions 1089
11.18.2 Auction rules 1089
11.19 Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007 1089
11.19.1 Definitions 1089
11.19.2 Regions Publication 1090
11.20 Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008 1090
11.20.1 Definitions 1090
11.20.2 Metering installations for non-market generating units immediately prior to 30 June 2008 1090
11.20.3 First-tier load metering installations 1091
11.20.4 First-tier load metering installations in Victoria 1091

11.20.5 Minimalist Transitioning Approach in Queensland 1091
11.20.6 First-tier jurisdictional requirements publication 1092
11.20.7 Metrology procedure 1092
11.21 Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6 1092
11.21.1 Definitions 1092
11.21.2 EAAP guidelines 1092
11.21.3 AEMO procedures for exercising RERT 1093
11.21.4 RERT guidelines 1093
11.21.5 Timetable 1094
11.21.6 Power system security and reliability standards 1094
11.21.7 Report on statement of opportunities 1094
11.21.8 Methodology for dispatch prices and ancillary services prices 1094
11.22 Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008 1095
11.22.1 Definitions 1095
11.22.2 Amending Rule does not affect existing regulatory test 1095
11.23 Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008 1096
11.23.1 Definitions 1096
11.23.2 Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule 1096
11.23.3 Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule 1096
11.23.4 Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule 1096
11.24 Rules consequential on the making of National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008 1097
11.24.1 Definitions 1097
11.23.2 Compensation Guidelines 1097
11.25 Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009 1097
11.25.1 Definitions 1097
11.25.2 Transitional arrangements for the provision of information 1097
11.26 Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009 1099

11.26.1 Definitions 1099
11.26.2 Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015 1099
11.27 Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009 1100
11.27.1 Definitions 1100
11.27.2 Purpose 1100
11.27.3 Application of rule 11.27 1100
11.27.4 National Transmission Statement 1101
11.27.5 Scope and Content of National Transmission Network Development Plan 1103
11.27.6 Energy Adequacy Assessment Projection 1103
11.27.7 Amendment to Last Resort Power 1103
11.27.8 Actions taken prior to commencement of Rule 1103
11.28 Rules consequential on the making of the National Electricity (Australian Energy Market Operator) Amendment Rules 2009 1103
11.28.1 Definitions 1103
11.28.2 Jurisdictional planning bodies and representatives 1104
11.28.3 Criteria and guidelines published by Inter-regional Planning Committee 1104
11.28.4 Augmentation technical reports 1105
11.28.5 Last Resort Planning Power 1105
11.28.6 Inter-network power system tests 1105
11.28.7 Control and protection settings for equipment 1105
11.29 Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009 1106
11.29.1 Definitions 1106
11.29.2 Period when Amending Rule applies to transmission investment 1107
Chapter 6 Economic Regulation of Distribution Services 1108
6.1 Introduction to Chapter 6 1108
6.1.1 AER's regulatory responsibility 1108
6.1.2 Structure of this Chapter 1108
6.1.3 Access to direct control services and negotiated distribution services 1109
6.1.4 Prohibition of DUOS charges for the export of energy 1110
6.1.5 Application of this Chapter to certain transmission assets – ActewAGL, Country Energy and Integral Energy Australia 1110
6.1.6 Application of this Chapter to the EnergyAustralia transmission support network 1110
6.1.7 Definitions 1111

6.2 Classification 1113
6.2.1 ***** 1113
6.2.2 ***** 1113
6.2.3 ***** 1113
6.2.3A Classes and subclasses of distribution services 1113
6.2.3B Classification for NSW Distribution Network Service Providers 1114
6.2.3C Classification for ACT Distribution Network Service Provider 1116
6.2.4 Duty of AER to make distribution determinations 1117
6.2.5 Control mechanisms for direct control services 1118
6.2.6 Basis of control mechanisms for direct control services 1119
6.2.7 EnergyAustralia negotiated distribution services 1120
6.2.7A Negotiable components of direct control services (NSW and ACT) 1120
6.2.8 Guidelines 1120
6.3 Building block determinations 1121
6.3.1 Introduction 1121
6.3.2 Contents of building block determination 1121
6.4 Post-tax revenue model 1122
6.4.1 Preparation, publication and amendment of post-tax revenue model 1122
6.4.2 Contents of post-tax revenue model 1122
6.4.3 Building block approach 1122
6.5 Matters relevant to the making of building block determinations 1124
6.5.1 Regulatory asset base 1124
6.5.2 Return on capital 1126
6.5.3 Estimated cost of corporate income tax 1128
6.5.4 ***** 1129
6.5.5 Depreciation 1129
6.5.6 Forecast operating expenditure 1129
6.5.7 Forecast capital expenditure 1132
6.5.8 Efficiency benefit sharing scheme 1134
6.5.9 The X factor 1135
6.6 Adjustments after making of building block determination 1136
6.6.1 Cost pass through 1136
6.6.2 Service target performance incentive scheme 1140
6.6.3 Demand management incentive scheme 1142
6.7 Negotiated distribution services 1143
6.7.1 Principles relating to access to negotiated distribution services 1144
6.7.2 Determination of terms and conditions of access for negotiated distribution services 1145

6.7.3 Negotiating framework determination 1146
6.7.4 Negotiated Distribution Service Criteria determination 1146
6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services 1147
6.7.6 Confidential information 1149
6.7A Negotiable components of direct control services 1149
6.7A.1 Principles relating to access to negotiable components 1150
6.7A.2 Determination of terms and conditions of access for negotiable components 1152
6.7A.3 Negotiating framework determination 1152
6.7A.4 Negotiable component criteria determination 1152
6.7A.5 Preparation of and requirements for negotiating framework 1153
6.7A.6 Confidential information 1155
6.8 Regulatory proposal 1156
6.8.1 ***** 1156
6.8.2 Submission of regulatory proposal 1156
6.9 Preliminary examination and consultation 1157
6.9.1 Preliminary examination 1157
6.9.2 Resubmission of proposal 1157
6.9.3 Consultation 1157
6.10 Draft distribution determination and further consultation 1158
6.10.1 Making of draft distribution determination 1158
6.10.2 Publication of draft determination and consultation 1158
6.10.3 Submission of revised proposal 1159
6.11 Distribution determination 1160
6.11.1 Making of distribution determination 1160
6.11.2 Notice of distribution determination 1160
6.11.3 Commencement of distribution determination 1160
6.12 Requirements relating to draft and final distribution determinations 1161
6.12.1 Constituent decisions 1161
6.12.1A Division of EnergyAustralia's revenue 1163
6.12.2 Reasons for decisions 1164
6.12.3 Extent of AER's discretion in making distribution determinations 1164
6.13 Revocation and substitution of distribution determination for wrong information or error 1165
6.14 Miscellaneous 1166
6.15 Cost allocation 1166
6.15.1 Duty to comply with Cost Allocation Method 1166
6.15.2 ***** 1167

6.15.3 ***** 1167
6.15.4 ***** 1167
Provisions applicable to the NSW Distribution Network Service Providers 1167
6.15.5 Cost Allocation Guidelines (NSW) 1167
6.15.6 Cost Allocation Method (NSW) 1167
Provisions applicable to the ACT Distribution Network Service Provider 1168
6.15.7 Cost Allocation Principles (ACT) 1168
6.15.8 Cost Allocation Method (ACT) 1169
6.17 Distribution Ring-Fencing Guidelines 1171
6.17.1 Compliance with Distribution Ring-Fencing Guidelines 1171
6.17.2 Development of Distribution Ring-Fencing Guidelines 1172
6.18 Distribution Pricing Rules 1173
6.18.1 Application of this Part 1173
6.18.2 Pricing proposals 1173
6.18.3 Tariff classes 1174
6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging 1174
6.18.5 Pricing principles 1175
6.18.6 Side constraints on tariffs for standard control services 1176
6.18.7 Recovery of charges for transmission use of system services 1177
6.18.8 Approval of pricing proposal 1177
6.18.9 Publication of information about tariffs and tariff classes 1178
6.19. Data Required for Distribution Service Pricing 1178
6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators 1178
6.19.2 Confidentiality of distribution network pricing information 1179
6.20 Billing and Settlements Process 1179
6.20.1 Billing for distribution services 1179
6.20.2 Minimum information to be provided in distribution network service bills1181
6.20.3 Settlement between Distribution Network Service Providers 1182
6.20.4 Obligation to pay 1182
6.21 Distribution Network Service Provider Prudential Requirements 1182
6.21.1 Prudential requirements for distribution network service 1182
6.21.2 Capital contributions, prepayments and financial guarantees 1183
6.21.3 Treatment of past prepayments and capital contributions 1183
6.21.4 Application of IPART and ICRC guidelines regarding capital contribution charges 1184
6.22 Dispute Resolution 1184
6.22.1 Dispute Resolution by the AER 1184

6.22.2 Determination of dispute 1184
6.22.3 Termination of access dispute without access determination 1186
6.23 Separate disclosure of transmission and distribution charges 1187
Schedule 6.1 Contents of building block proposals 1188
S6.1.1 Information and matters relating to capital expenditure 1188
S6.1.2 Information and matters relating to operating expenditure 1189
S6.1.3 Additional information and matters 1190
Schedule 6.2 Regulatory Asset Base 1192
S6.2.1 Establishment of opening regulatory asset base for a regulatory control period 1192
S6.2.2 ***** 1196
S6.2.3 Roll forward of regulatory asset base within the same regulatory control period 1196

CHAPTER 1

1. Introduction

1.1 Preliminary

1.1.1 References to the Rules

These Rules ("the *Rules*") are called the National Electricity Rules.

1.1.2 Italicised expressions

Italicised expressions in the *Rules* are defined in the glossary in Chapter 10.

1.1.3 [Deleted]

1.2 Background

These Rules are the National Electricity Rules made under the *National Electricity Law* and may be amended from time to time in accordance with the *National Electricity Law*.

1.3 Nomenclature of and references to provisions of a Chapter

1.3.1 Introduction

(a) This rule applies to provisions inserted after 16 November 2006, and applies unless the context otherwise requires.

(b) In this rule, "numbered" means identified by one or more numbers or one or more letters, or by a combination of one or more numbers and one or more letters.

1.3.2 Parts, Divisions and Subdivisions

(a) Chapters may contain numbered Parts.

(b) Parts may contain numbered Divisions.

(c) Divisions may contain numbered Subdivisions.

(d) The following table indicates how Parts, Divisions and Subdivisions may be referred to in the *Rules*.

Level	Provision	Internal reference in same level	External reference in preceding level
1	Chapter 1		
2	Part A	this Part	Part A
3	Division 1	this Division	Division 1
4	Subdivision 1	this Subdivision	Subdivision 1

Note: The numbering of the provisions in the table is by way of example.

1.3.3 Rules, clauses, paragraphs, subparagraphs and other items

(a) Chapters, Parts, Divisions and Subdivisions of the *Rules* may contain numbered rules.

(b) Rules may contain numbered clauses.

(c) Rules and clauses may contain numbered paragraphs.

(d) Paragraphs may contain numbered subparagraphs.

(e) Subparagraphs may contain numbered items.

(f) The following table indicates how rules, clauses, paragraphs, subparagraphs and other numbered items may be referred to in the *Rules*.

Level	Provision	Internal reference in same level	External reference in preceding level
1	Chapter, Part or Subdivision		
2	rule 1.2	this rule	rule 1.2
3	clause 1.2.3	this clause	clause 1.2.3
4	rule 1.2(a) clause 1.2.3(a)	this paragraph this paragraph	paragraph (a) paragraph (a)
5	rule 1.2(a)(1) clause 1.2.3(a)(1)	this subparagraph this subparagraph	subparagraph (1) subparagraph (1)
6	rule 1.2(a)(1)(i) clause 1.2.3(a)(1)(i)	this rule 1.2(a)(1)(i) this clause 1.2.3(a)(1)(i)	rule 1.2(a)(1)(i) clause 1.2.3(a)(1)(i)
7	rule 1.2(a)(1)(i)(A) clause 1.2.3(a)(1)(i)(A)	this rule 1.2(a)(1)(i)(A) this clause 1.2.3(a)(1)(i)(A)	rule 1.2(a)(1)(i)(A) clause 1.2.3(a)(1)(i)(A)

Note. The numbering of the provisions in the table is by way of example.

1.4 Effect of renumbering of provisions of the Rules

(a) The renumbering of a provision of the *Rules* by an *Amending Rule* does not affect anything done or omitted under the provision before the *Amending Rule* comes into operation.

(b) A reference (however expressed) in the *Rules* or in any other document to that provision is taken to be a reference to the provision as renumbered.

(c) Paragraphs (a) and (b) have effect whether or not the renumbered provision is also relocated.

1.5 [Deleted]

1.6 [Deleted]

1.7 Interpretation

1.7.1 General

In the *Rules*, unless the context otherwise requires:

(a) headings are for convenience only and do not affect the interpretation of the *Rules*;

(b) words importing the singular include the plural and vice versa;

(c) words importing a gender include any gender;

(d) when italicised, other parts of speech and grammatical forms of a word or phrase defined in the *Rules* have a corresponding meaning;

(e) an expression importing a natural person includes any company, partnership, trust, joint venture, association, corporation or other body corporate and any government agency;

(f) a reference to any thing includes a part of that thing;

(g) a reference to a chapter, condition, clause, schedule or part is to a chapter, condition, clause, schedule or part of the *Rules*;

(h) a reference to any statute, regulation, proclamation, order in council, ordinances or by-laws includes all statutes, regulations, proclamations, orders in council, ordinances and by-laws varying, consolidating, re-enacting, extending or replacing them and a reference to a statute includes all regulations, proclamations, orders in council, ordinances, by-laws and determinations issued under that statute;

(i) a reference to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, that document or that provision of that document;

(j) a reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assigns;

(k) a period of time:

(1) which dates from a given *day* or the *day* of an act or event is to be calculated exclusive of that *day*; or

(2) which commences on a given *day* or the *day* of an act or event is to be calculated inclusive of that *day*;

(l) an event which is required under the *Rules* to occur on or by a stipulated *day* which is not a *business day* may occur on or by the next *business day*; and

(m) the schedules to the *Rules* form part of the *Rules*.

It is not intended that any of the following provisions of *Schedule 2* to the Law should apply to the *Rules*:

Clauses 2, 4, 9, 10, 11, 21, 28, 29, 30, 31AH, 35, 36, 37 and 38.

This exclusion is in addition to an exclusion that arises from other provisions of the *Rules* in which an intention is expressed, or from which an intention may be inferred, that a provision of the relevant Schedule is not to apply to the *Rules*.

1.8 Notices

1.8.1 Service of notices under the Rules

A notice is properly given under the *Rules* to a person if:

(a) it is personally served;

(b) a letter containing the notice is prepaid and posted to the person at an address (if any) supplied by the person to the sender for service of notices or, where the person is a *Registered Participant*, an address shown for that person in the register of *Registered Participants* maintained by *AEMO*;

(c) it is sent to the person by facsimile or electronic mail to a number or reference which corresponds with the address referred to in clause 1.8.1(b); or

(d) the person receives the notice.

1.8.2 Time of service

A notice is treated as being given to a person by the sender:

(a) where sent by post in accordance with clause 1.8.1(b) to an address in the central business district of a capital city of Australia, on the second *business day* after the *day* on which it is posted;

(b) where sent by post in accordance with clause 1.8.1(b) to any other address, on the third *business day* after the *day* on which it is posted;

(c) where sent by facsimile in accordance with clause 1.8.1(c) and a complete and correct transmission report is received:

(1) where the notice is of the type in relation to which the addressee is obliged under the *Rules* to monitor the receipt by facsimile outside of, as well as during, business hours, on the *day* of transmission; and

(2) in all other cases, on the *day* of transmission if a *business day* or, if the transmission is on a *day* which is not a *business day* or is after 4.00 pm (addressee's time), at 9.00 am on the following *business day*;

(d) where sent by electronic mail in accordance with clause 1.8.1(c):

(1) where the notice is of a type in relation to which the addressee is obliged under the *Rules* to monitor receipt by electronic mail outside of, as well as during, business hours, on the *day* when the notice is recorded as having been first received at the electronic mail destination; and

(2) in all other cases, on the *day* when the notice is recorded as having been first received at the electronic mail destination if a *business day* or, if that time is after 4.00 pm (addressee's time) or the *day* is not a *business day*, at 9.00 am on the following *business day*; or

(e) in any other case, when the person actually receives the notice.

1.8.3 Counting of days

Where a specified period (including, without limitation, a particular number of *days*) must elapse or expire from or after the giving of a notice before an action may be taken neither the *day* on which the notice is given nor the *day* on which the action is to be taken may be counted in reckoning the period.

1.8.4 Reference to addressee

In this rule 1.8, a reference to an addressee includes a reference to an addressee's officers, agents, or employees or any person reasonably believed by the sender to be an officer, agent or employee of the addressee.

1.9 Retention of Records and Documents

Unless otherwise specified in the *Rules*, all records and documents prepared for or in connection with the *Rules* must be retained for a period of at least 7 years.

1.10 [Deleted]

1.11 AEMO Rule Funds

(a) *AEMO* must continue to maintain, in the books of the corporation:

(1) the registration and administration fund;

(2) the security deposit fund; and

(3) any other fund which the *Rules* provide will be maintained in *AEMO's* books,

(each a *"Rule fund"*).

(b) *AEMO* must ensure that there is paid into each *Rule fund:*

(1) in the case of the registration and administration fund, all amounts of *Participant fees* and *auction expense fees* and any other amounts payable under the *auction rules* or *SRD agreements* as *AEMO* considers necessary from time to time other than those which are to be paid into another *Rule fund;*

(2) in the case of the security deposit fund, amounts which are received by *AEMO* under clauses 3.3.8A, 3.3.13(a)(2) and 3.3.13(a)(3);

(3) in the case of a fund referred to in paragraph (a)(3):

(i) all amounts which are received by *AEMO* in connection with carrying out its functions or powers in relation to that fund;

(ii) all amounts of *Participant fees* which are received or recovered by *AEMO* which relate to *AEMO's* actual or budgeted costs and expenses for carrying out its functions or powers in relation to that fund; and

(4) in the case of each *Rule fund*, income from investment of money in the *Rule fund.*

(c) In respect of the security deposit fund, *AEMO* must keep records, in respect of each individual *Market Participant*, of:

(1) security deposits made by that *Market Participant* and actual interest or other income earned on that *Market Participant's* payments to that fund which will be recorded as credits for that *Market Participant*;

(2) any application, or return to that *Market Participant*, of monies in the security deposit fund in accordance with clause 3.3.13A;

(3) deductions for liabilities and expenses of the security deposit fund referable, or allocated, to that *Market Participant* which will be recorded as debits to that *Market Participant*; and

(4) the credit or debit balance for that *Market Participant*.

(d) *AEMO* must ensure that money from each *Rule fund* is only applied in payment of:

(1) in the case of the registration and administration fund, costs and expenses of *AEMO* carrying out its functions or powers:

(i) in relation to a fund referred to paragraph (a)(3) to the extent that such costs and expenses cannot be met from the money contained in that fund*;* or

(ii) other than those functions and powers referred to in subparagraph (i);

(2) in the case of the security deposit fund, monies owing to *AEMO* by a *Market Participant* or the return of monies to a *Market Participant* in accordance with clause 3.3.13A;

(3) in the case of a fund referred to in paragraph (a)(3), costs and expenses of *AEMO* carrying out its functions or powers in relation to that fund; and

(4) in the case of each *Rule fund*:

(i) other than the security deposit fund, reimbursement to a *Registered Participant* or another *Rule fund* to make any necessary adjustment for any excess amounts which are paid as *Participant fees* as a result of any of *AEMO's* actual costs and expenses being less than the budgeted costs and expenses or as a result of the payment of any interim *Participant fees;* and

(ii) liabilities or expenses of the *Rule fund.*

CHAPTER 2

2. Registered Participants and Registration

2.1 Registered Participants

2.1.1 Purpose

This Chapter sets out and describes the various categories of *Registered Participants* and the registration procedures. It also sets out the fees payable by *Registered Participants.*

2.1.2 General

(a) **[Deleted]**

(b) **[Deleted]**

(c) The different categories of *Registered Participants* have different obligations under the *Rules*.

(d) Rules 2.2 to 2.7 set out the *Registered Participant* categories and requirements which a person must satisfy in order to be registered by *AEMO* in relation to each of those *Registered Participant* categories.

(e) Each prospective *Registered Participant* must apply to *AEMO* for registration in accordance with rule 2.9.

(e1) Rule 2.9A sets out the process to be followed in order to transfer a *Registered Participant*'s registration to another person.

(f) Each *Registered Participant* must pay to *AEMO* the prescribed fees determined in accordance with the provisions of rule 2.11.

2.2 Generator

2.2.1 Registration as a Generator

(a) Subject to clause 2.2.1(c), a person must not engage in the activity of owning, controlling or operating a *generating system* that is *connected* to a *transmission or distribution system* unless that person is registered by *AEMO* as a *Generator*.

(b) A person who otherwise *supplies* electricity to a *transmission or distribution system* may, on application for registration by that person in accordance with rule 2.9, be registered by *AEMO* as a *Generator.*

(c) *AEMO* may, in accordance with guidelines issued from time to time by *AEMO*, exempt a person or class of persons from the requirement to register as a *Generator*, subject to such conditions as *AEMO* deems appropriate, where (in *AEMO's* opinion) an exemption is not inconsistent with the *national electricity objective.*

(d) Without limitation, an exemption may be given which only relieves a person or class of persons from the requirement to register as a *Generator* in relation to certain specified *generating systems* or classes of *generating systems.*

(e) To be eligible for registration as a *Generator*, a person must:

(1) obtain the approval of *AEMO* to classify each of the *generating units* that form part of the *generating system* that the person owns, operates or controls, or from which it otherwise sources electricity, as:

(i) a *scheduled generating unit*;

(ii) a *semi-scheduled generating unit*; or

(iii) a *non-scheduled generating unit*;

(2) classify the *generating units* in accordance with *AEMO's* approval as referred to in subparagraph (1); and

(3) satisfy *AEMO* that each *generating system* will be capable of meeting or exceeding its *performance standards.*

(f) Except in relation to a proposed *generating unit,* a person must also classify each of those *generating units* as either a *market generating unit* or a *non-market generating unit.*

(f1) A *Generator* may also classify one or more of its *generating units* as an *ancillary service generating unit* where it has obtained the approval of *AEMO* to do so.

(g) Nothing in clause 2.2.1(e) or (f) requires the classification of any *generating unit* which forms part of a *generating system* in respect of which an exemption under clause 2.2.1(c) applies.

2.2.2 Scheduled Generator

(a) A *generating unit* which has a *nameplate rating* of 30 MW or greater or is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of 30 MW or greater must be classified as a *scheduled generating unit* unless *AEMO* approves its classification as:

(1) a *semi-scheduled generating unit* under clause 2.2.7(b); or

(2) a *non-scheduled generating unit* in accordance with clause 2.2.3(b).

(b) A person must not classify a *generating unit* as a *scheduled generating unit* unless it has obtained the approval of *AEMO* to do so. *AEMO* must approve the classification if it is satisfied that the person:

(1) has submitted data in accordance with schedule 3.1; and

(2) has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses.

(b1) In relation to an application under clause 2.2.2(b) to classify as a *scheduled generating unit* a *generating unit* with a *nameplate rating* of less than 30 MW, or a *generating unit* that is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of less than 30 MW, *AEMO* may approve the classification on such terms and conditions as *AEMO* considers appropriate.

(c) A person must comply with any terms and conditions imposed by *AEMO* as part of an approval under clause 2.2.2(b1).

(d) **[Deleted]**

(e) A *Generator* is taken to be a *Scheduled Generator* only in so far as its activities relate to any *scheduled generating unit.*

(f) A *Scheduled Generator* must operate any *scheduled generating unit* in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3.

(g) As described in Chapter 3, a *Scheduled Generator* must notify *AEMO* of the availability of each *scheduled generating unit* in respect of each *trading interval*.

(h) A *Scheduled Generator* may submit to *AEMO* a schedule of *dispatch offers* for each *scheduled generating unit* in respect of each *trading interval* for *dispatch* by *AEMO*.

2.2.3 Non-Scheduled Generator

(a) A *generating unit* with a *nameplate rating* of less than 30 MW (not being part of a group of *generating units* described in clause 2.2.2(a)) must be classified as a *non-scheduled generating unit* unless *AEMO* approves its classification as:

(1) a *scheduled generating unit* under clause 2.2.2(b); or

(2) a *semi-scheduled generating unit* under clause 2.2.7(b).

(b) A person must not classify a *generating unit* as a *non-scheduled generating unit* unless the person has obtained the approval of *AEMO* to do so. *AEMO* must approve the classification if it is satisfied that:

(1) the primary purpose for which the relevant *generating unit* operates is local use and the aggregate *sent out generation* at its *connection point* rarely, if ever, exceeds 30 MW; or

(2) the physical and technical attributes of the relevant *generating unit* are such that it is not practicable for it to participate in *central dispatch*.

(c) If, in relation to an application under paragraph (b), in *AEMO's* opinion it is necessary for any reason (including *power system security*) for the relevant *Generator* to comply with some of the obligations of a *Scheduled Generator* or *Semi-Scheduled Generator* for that *generating unit, AEMO* may approve the

classification on such terms and conditions as *AEMO* considers reasonably necessary.

(d) A person must comply with any terms and conditions imposed by *AEMO* under paragraph (c).

(e) A *Generator* is taken to be a *Non-Scheduled Generator* only in so far as its activities relate to a *non-scheduled generating unit*.

(f) Subject to clause 3.8.2(e), the *non-scheduled generating units* of a *Generator* do not participate in the co-ordinated *central dispatch* process operated by *AEMO.*

2.2.4 Market Generator

(a) A *generating unit* whose *sent out generation* is not purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* must be classified as a *market generating unit*.

(b) A *Generator* is taken to be a *Market Generator* only in so far as its activities relate to any *market generating units*.

(c) A *Market Generator* must sell all *sent out generation* through the *spot market* and accept payments from *AEMO* for *sent out generation* at the *spot price* applicable at the *connection point* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

(d) A *Market Generator* must purchase all electricity *supplied* through the *national grid* to the *Market Generator* at that *connection point* from the *spot market* and make payments to *AEMO* for such electricity supplied at the *connection point* as determined for each *trading interval* in accordance with the provisions of Chapter 3.

2.2.5 Non-Market Generator

(a) A *generating unit* whose *sent out generation* is purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* must be classified as a *non-market generating unit*.

(b) A *Generator* is taken to be a *Non-Market Generator* only in so far as its activities relate to any *non-market generating unit.*

(c) A *Non-Market Generator* is not entitled to receive payment from *AEMO* for *sent out generation* except for any compensation that may be payable to it as a *Directed Participant* or *Affected Participant*.

2.2.6 Ancillary services generating unit

(a) If the *Market Generator* in respect of a *generating unit* wishes to use that *generating unit* to provide *market ancillary services* in accordance with Chapter 3, then the *Market Generator* must apply to *AEMO* for approval to classify the *generating unit* as an *ancillary service generating unit*.

(b) An application under clause 2.2.6(a) must be in the form prescribed by *AEMO* and specify the *market ancillary services* which the *Market Generator* wishes to provide using the relevant *generating unit*.

(c) *AEMO* must, within 5 *business days* of receiving an application under clause 2.2.6(a), advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO's* reasonable opinion, the application:

(1) is incomplete; or

(2) contains information upon which *AEMO* requires clarification.

(d) If the further information or clarification required pursuant to clause 2.2.6(c) is not provided to *AEMO's* satisfaction within 15 *business days* of the request, then the *Market Generator* will be deemed to have withdrawn the application.

(e) If *AEMO* is reasonably satisfied that:

(1) the *generating unit* is able to be used to provide the *market ancillary services* referred to in the application in accordance with the *market ancillary service specification*; and

(2) the *Market Generator* has adequate communication and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses,

then *AEMO* must approve the classification in respect of the particular *market ancillary services.*

(f) If *AEMO* approves the classification of a *generating unit* as an *ancillary service generating unit*, then *AEMO* may impose on the relevant *Market Generator* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *market ancillary services* can be met.

(g) A *Market Generator:*

(1) must comply with any terms and conditions imposed by *AEMO* under clause 2.2.6(f);

(2) must ensure that the *market ancillary services* provided using the relevant *ancillary services generating unit* are provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3 and in accordance with the *market ancillary service specification;*

(3) may submit to *AEMO market ancillary service offers* in respect of the *ancillary service generating unit* in accordance with the provisions of Chapter 3; and

(4) if the *Market Generator* submits a *market ancillary service offer* in respect of the relevant *ancillary service generating unit*, must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules.*

(h) A *Market Generator* with an *ancillary service generating unit* must only sell the *market ancillary services* produced using that *ancillary service generating unit* through the *spot market* in accordance with the provisions of Chapter 3.

(i) A *Market Generator* is not entitled to receive payment from *AEMO* for *market ancillary services* except where those *market ancillary services* are produced using an *ancillary service generating unit* in accordance with Chapter 3 or pursuant to a *direction* or *clause 4.8.9 instruction*.

2.2.7 Semi-Scheduled Generator

(a) A *generating unit* which has a *nameplate rating* of 30 MW or greater or is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of 30 MW or greater, must be classified as a *semi-scheduled generating unit* where the output of the *generating unit* is *intermittent* unless *AEMO* approves its classification as:

(1) a *scheduled generating unit* under clause 2.2.2(b); or

(2) a *non-scheduled generating unit* under clause 2.2.3(b).

(b) A person must not classify a *generating unit* as a *semi-scheduled generating unit* unless the person has obtained the approval of *AEMO* to do so.

(c) *AEMO* must approve a request for classification as a *semi-scheduled generating unit* if it is satisfied that the output of the *generating unit* is *intermittent* and that the person:

(1) has submitted data in accordance with schedule 3.1;

(2) has submitted an *energy conversion model* which contains the information described in the guidelines referred to in paragraph (d); and

(3) has adequate communications and telemetry to support the issuing of *dispatch instructions* and the audit of responses.

(d) *AEMO* must develop and *publish* guidelines in consultation with *Semi-Scheduled Generators* and such other person that *AEMO,* acting reasonably, considers appropriate setting out the information to be contained in *energy conversion models*. Any amendments to the guidelines are also to be made in consultation with *Semi-Scheduled Generators* and such other person that *AEMO,* acting reasonably, considers appropriate.

(e) In relation to an application under paragraph (b) to classify a *generating unit* with a *nameplate rating* of less than 30 MW, or a *generating unit* that is part of a group of *generating units connected* at a common *connection point* with a combined *nameplate rating* of less than 30 MW, as a *semi-scheduled generating unit*, *AEMO* may approve the classification on such terms and conditions as *AEMO* considers appropriate.

(f) A person must comply with any terms and conditions imposed by *AEMO* as part of an approval under paragraph (e).

(g) A *Generator* is taken to be a *Semi-Scheduled Generator* only in so far as its activities relate to a *semi-scheduled generating unit.*

(h) A *Semi-Scheduled Generator* must operate a *semi-scheduled generating unit* in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3.

(i) At the time that a person makes a request for *AEMO* to classify a *semi-scheduled generating unit* under paragraph (c), that person may request to register two or more *generating units* as one *semi-scheduled generating unit* when the *generating units*:

(1) are connected at a single site with the same *intra-regional loss factor*;

(2) each have a capacity of not more than 6MW; and

(3) have similar *energy conversion models*,

and *AEMO* must approve the request unless, in *AEMO's* opinion, registering the relevant *generating units* as one *semi-scheduled generating unit* could adversely impact on *power system security*.

(j) Notwithstanding that one or more of the conditions set out in paragraph (i) may not have been fulfilled by the *Semi-Scheduled Generator*, *AEMO* may approve a request received under paragraph (i) if registration as a single *semi-scheduled generating unit* would not materially distort *central dispatch* or adversely affect *power system security*.

(k) Where *AEMO* approves a request to register two or more *generating units* as one *semi-scheduled generating unit* in accordance with paragraph (i) or (j), the *generating units* will be taken to be one *semi-scheduled generating unit* for the purposes of the *Rules*.

(l) For the avoidance of doubt, a *Semi-Scheduled Generator* which operates two or more *semi-scheduled generating units* that could have been registered as a single *semi-scheduled generating unit* under paragraph (i) but were not so registered, may subsequently aggregate those *generating units* in accordance with clause 3.8.3.

2.3 Customer

2.3.1 Registration as a Customer

(a) A *Customer* is a person so registered by *AEMO* and who engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point.*

(b) To be eligible for registration as a *Customer,* a person must satisfy *AEMO* (acting reasonably) that:

(1) the person intends to classify within a reasonable period of time its electricity purchased at one or more *connection points* as a *first-tier load*, a *second-tier load* or a *market load* or an *intending load;* or

(2) registration is for the purpose of acting as a *retailer of last resort*.

(c) A person must not engage in the activity of purchasing electricity directly from the *market* at any *connection point*, unless that person is registered by *AEMO* as a *Market Participant* and that *connection point* is classified as one of that person's *market connection points*.

(d) A person who engages in the activity of purchasing electricity at any *connection point* otherwise than directly from the *market* may, but is not required to, apply for registration by *AEMO* as a *First-Tier Customer*, a *Second-Tier Customer* or an *Intending Participant* provided that person is entitled to classify its electricity purchased at that *connection point* based on the threshold criteria set out in clause 2.3.1(e).

(e) A person may not classify its electricity purchased at any *connection point* unless the person satisfies the requirements of the *participating jurisdiction* in which the *connection point* is situated so that (subject to compliance with the *Rules*) the person is permitted to purchase electricity in the *spot market* in relation to that *connection point*.

(f) A *Market Customer* may also classify one or more of its *market loads* as an *ancillary service load.*

2.3.2 First-Tier Customer

(a) If any electricity *supplied* through the *national grid* is purchased by a person at a *connection point* directly and in its entirety from the *Local Retailer*, the *load* at that *connection point* may be classified by that person as a *first-tier load.*

(b) A *Customer* is taken to be a *First-Tier Customer* only in so far as its activities relate to any *first-tier load.*

(c) A *First-Tier Customer* must not participate in the *spot market* for any *first-tier load.*

2.3.3 Second-Tier Customer

(a) Subject to clause 2.3.3(d), if any electricity *supplied* through the *national grid* is purchased by a person at a *connection point* other than directly from the *Local Retailer* or the *spot market* all electricity purchased by that person at that *connection point* may be classified by that person as a *second-tier load.*

(b) A *Customer* is taken to be a *Second-Tier Customer* only in so far as its activities relate to any *second-tier load.*

(c) A *Second-Tier Customer* must not participate in the *spot market* for any of its *second-tier loads.*

(d) A person's purchase of electricity at a *connection point* may only be classified as a *second-tier load* while a *Market Customer*, from whom the person directly or indirectly purchases the electricity, classifies the *connection point* as one of its *market loads*.

2.3.4 Market Customer

(a) If electricity, *supplied* through the *national grid* to any person *connected* at a *connection point,* is purchased other than from the *Local Retailer* that *load* at the *connection point* may be classified by that person or, with the consent of that person, by some other person as a *market load.*

(b) A *Customer* is taken to be a *Market Customer* only in so far as its activities relate to any *market load* and only while it is also registered with *AEMO* as a *Market Customer*.

(c) A *Market Customer* must purchase all electricity *supplied* at that *connection point* from the *spot market* and make payments to *AEMO* for electricity supplied at the *connection point* as determined for each *trading interval* in accordance with provisions of Chapter 3.

(d) A *Market Customer* may request *AEMO* to classify any of its *market loads* as a *scheduled load*.

(e) *AEMO* must classify a *market load* as a *scheduled load* if it is satisfied that the *Market Customer*:

(1) has submitted data in accordance with schedule 3.1;

(2) has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses; and

(3) has requested that the *load* be so classified and has not withdrawn that request.

(f) A *Market Customer* may submit *dispatch bids* in respect of *scheduled loads* in accordance with the provisions of Chapter 3.

(g) A *Market Customer* who submits *dispatch bids* for *scheduled loads* and makes its *scheduled loads* available for *central dispatch* must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules*.

(h) A *Customer* who is also a *Local Retailer* must classify any *connection point* which *connects* its *local area* to another part of the *power system* as a *market load.*

2.3.5 Ancillary services load

(a) If the *Market Customer* in respect of a *market load* wishes to use that *market load* to provide *market ancillary services* in accordance with Chapter 3, then the *Market Customer* must apply to *AEMO* for approval to classify the *market load* as an *ancillary service load*.

(b) An application under clause 2.3.5(a) must be in the form prescribed by *AEMO* and specify the *market ancillary services* which the *Market Customer* wishes to provide using the relevant *market load.*

(c) *AEMO* must, within 5 *business days* of receiving an application under clause 2.3.5(a), advise the applicant of any further information or clarification which

is required in support of its application if, in *AEMO's* reasonable opinion, the application:

(1) is incomplete; or

(2) contains information upon which *AEMO* requires classification.

(d) If the further information or clarification required pursuant to clause 2.3.5(c) is not provided to *AEMO's* satisfaction within 15 *business days* of the request, then the *Market Customer* will be deemed to have withdrawn the application.

(e) If *AEMO* is reasonably satisfied that:

(1) the *market load* is able to be used to provide the *market ancillary services* referred to in the application in accordance with the *market ancillary service specification*; and

(2) the *Market Customer* has adequate communications and/or telemetry to support the issuing of *dispatch instructions* and the audit of responses,

then *AEMO* must approve the classification in respect of the particular *market ancillary services*.

(f) If *AEMO* approves the classification of a *market load* as an *ancillary service load*, then *AEMO* may impose on the relevant *Market Customer* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *market ancillary services* can be met.

(g) A *Market Customer*:

(1) must comply with any terms and conditions imposed by *AEMO* under clause 2.3.5(f);

(2) must ensure that the *market ancillary services* provided using the relevant *ancillary services load* are provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3 and in accordance with the *market ancillary service specification*;

(3) may submit to *AEMO market ancillary service offers* in respect of the *ancillary service load* in accordance with the provision of Chapter 3; and

(4) if the *Market Customer* submits a *market ancillary service offer* in respect of the relevant *ancillary service load,* must comply with the *dispatch instructions* from *AEMO* in accordance with the *Rules*.

(h) A *Market Customer* with an *ancillary service load* must only sell the *market ancillary services* produced using that *ancillary service load* through the *spot market* in accordance with the provisions of Chapter 3.

(i) A *Market Customer* is not entitled to receive payment from *AEMO* for *market ancillary services* except where those *market ancillary services* are produced using an *ancillary service load* in accordance with Chapter 3 or pursuant to a *direction* or *clause 4.8.9 instruction*.

2.4 Market Participant

2.4.1 Registration as a category of Market Participant

(a) A *Market Participant* is a person registered by *AEMO* as any one or more of the following categories:

(1) *Market Customer*;

(2) *Market Generator*;

(3) *Market Network Service Provider.*

(b) A *Market Participant* may only participate in the *market* in the category in which it has been registered.

(c) A *Market Participant* may only participate in any of the *markets* or trading activities conducted by *AEMO* if that *Market Participant* satisfies the relevant *prudential requirements* set out in Chapter 3 applicable to the relevant trading activity.

2.4.2 Eligibility

To be eligible to be registered as any category of *Market Participant*, a person must:

(a) satisfy *AEMO* that it is and will be able to satisfy the *prudential requirements* as set out in rule 3.3 applicable to all *Market Participants* and those applicable to the relevant category of *Market Participant* in which that person wishes to participate in the *market*;

(b) satisfy *AEMO* that it meets any relevant requirements imposed under relevant *jurisdictional electricity legislation*;

(c) satisfy *AEMO* that it is also registered:

(1) as a *Generator,* for registration as a *Market Generator;*

(2) as a *Customer,* for registration as a *Market Customer;* or

(3) as a *Network Service Provider,* for registration as a *Market Network Service Provider;*

(d) satisfy *AEMO* that it is complying and will comply with other relevant obligations set out in the *Rules*; and

(e) pay the prescribed fees determined in accordance with rule 2.11.

2.5 Network Service Provider

2.5.1 Registration as a Network Service Provider

(a) Subject to clause 2.5.1(d), a person must not engage in the activity of owning, controlling or operating a *transmission or distribution system* unless that person is registered by *AEMO* as a *Network Service Provider*.

(b) **[Deleted]**

(c) **[Deleted]**

(d) The *AER* may, in accordance with the guidelines issued from time to time by the *AER*, exempt any person or class of persons who is or are required to register as a *Network Service Provider* from:

(1) the requirement to register as a *Network Service Provider;* or

(2) the operation of Chapter 5,

subject to such conditions as the *AER* deems appropriate where (in the *AER's* opinion) an exemption is not inconsistent with the *national electricity objective*.

(e) The *AER* must develop and issue guidelines for the exemptions described in clause 2.5.1(d) pursuant to the *Rules consultation procedures* and in accordance with those procedures consult with *Registered Participants* and authorities responsible for administering the *jurisdictional electricity legislation*.

(e1) Without limitation, an exemption may be given which only relates to certain specified *transmission or distribution systems* or classes of *transmission or distribution systems.*

(f) Prior to granting any exemption under clause 2.5.1(d), the *AER* must consult with the authorities responsible for administering the *jurisdictional electricity legislation* in the *participating jurisdictions* in which any *transmission systems* or *distribution systems* owned, operated or controlled by persons or class of persons under exemption consideration are located.

(g) Without limitation, an exemption may be given which only relieves a person or class of persons from either or both of the matters described in clause 2.5.1(d)(1) or (2) in relation to certain specified *transmission or distribution systems* or classes of *transmission or distribution systems.*

2.5.2 Market Network Service

(a) A *Network Service Provider* may classify a *network service* as a *market network service* if and only if the following conditions are satisfied and continue to be satisfied:

(1) the relevant *network service* is to be provided by *network elements* which comprise a *two-terminal link* and do not provide any *transmission service* which is subject to a *revenue determination* or any *direct control service*;

(2) the *Network Service Provider* is registered under clause 2.5.1 in respect of the *network elements* which provide the relevant *market network service;*

(3) the relevant *network service*:

(A) has not ever been a *transmission service* to which a *transmission determination* has applied or *a direct control service;* or

(B) is ineligible to be such a service;

(4) the *connection points* of the relevant *two-terminal link* are assigned to different *regional reference nodes*; and

(5) the relevant *two-terminal link* through which the *network service* is provided:

(A) does not form part of a *network loop;* or

(B) is an *independently controllable two-terminal link*,

and has a registered *power transfer capability* of at least 30 MW.

(b) A *market network service* is not a prescribed transmission service or a *direct control service* and a *Network Service Provider* is not entitled to impose charges for a *market network service* under Chapter 6 or Chapter 6A.

(c) If an existing *network service* ceases to be classified as a *market network service*, the *AER* may at is discretion determine the service to be a *prescribed transmission service* or a *direct control service*. In that case, the *AER* may make consequential changes to the relevant transmission determination or distribution determination (as the case requires) to accommodate the service.

(d) A *Network Service Provider* is taken to be a *Market Network Service Provider* only in so far as its activities relate to the provision of *market network services.*

(e) For the avoidance of doubt, a *Registered Participant* may apply to the *AEMC* for a *participant derogation* from the conditions specified in clause 2.5.2(a).

2.5.3 Scheduled Network Service

(a) All *market network services* must be classified as *scheduled network services.*

(b) A *network service* must not be classified as a *scheduled network service* unless it is also a *market network service*.

(c) A *Network Service Provider* is taken to be a *Scheduled Network Service Provider* only in so far as its activities relate to the provision of *scheduled network services*.

(d) *AEMO* may impose on a *Scheduled Network Service Provider* such terms and conditions as *AEMO* considers necessary to ensure that the provisions of the *Rules* applying to *scheduled network services* can be met.

(e) A *Scheduled Network Service Provider:*

(1) must comply with any terms and conditions imposed by *AEMO* under clause 2.5.3(d);

(2) must ensure that the *scheduled network services* are provided in accordance with the co-ordinated *central dispatch* process operated by *AEMO* under the provisions of Chapter 3;

(3) must ensure that *AEMO* is notified of the availability of the *scheduled network services* in accordance with the provisions of Chapter 3; and

(4) must submit to *AEMO* a schedule of *dispatch offers* for the *scheduled network services* in accordance with the provisions of Chapter 3.

2.5A Trader

(a) A *Trader* is a person so registered by *AEMO* in order to participate in *auctions* under rule 3.18.

(b) A person who is registered by *AEMO* as a *Trader* is:

(1) a *Registered Participant* for the purposes of the *National Electricity Law* and rules 2.9, 2.10, 2.11, 3.18, 8.2, 8.9 and subparagraph (3), and clause 3.13.5A;

(2) is to be treated as a *Market Participant* for the purposes of clause 3.3.1 and rule 3.15 (as applied and modified by clause 3.18.4) provided that a person who is registered by *AEMO* as a *Trader* is not to be regarded as a *Market Participant* for the purposes of clauses 3.3.1(a) and 3.15.1(b); and

(3) entitled to receive any information which *AEMO* is required to *publish* or otherwise make available to *Registered Participants* (other than *confidential information* in respect of one or more other *Registered Participants*),

but is not otherwise a *Registered Participant* for the purposes of the *Rules* unless they are also registered in another category of *Registered Participant.*

(c) To be eligible for registration as a *Trader*, a person must:

(1) have an office in Australia to which all communications and notices may be addressed and at which a representative of the person is present at all times during business hours;

(2) where the person is not resident in, or does not have a permanent establishment in, Australia, appoint a person ('an **agent**') who is:

(i) a natural person or company;

(ii) resident in Australia; and

(iii) authorised to accept service of process and notices on behalf of that person,

and provide *AEMO* with a certified copy of the instrument, executed by the agent, under which the agent is so appointed and which specifies the agent's address;

(3) be a "wholesale client", as that term is defined in section 761G(4) of the *Corporations Act 2001* of the Commonwealth; and

(4) enter into an *auction participation agreement* and, where the person is required to appoint an agent for the purposes of rule 2.5A(c)(2), the person must ensure that the agent is a party to the *auction participation agreement*.

2.5B Reallocator

(a) A *Reallocator* is a person so registered by *AEMO* in order to participate in *reallocation transactions* under clause 3.15.11.

(b) A person who is registered with *AEMO* as a *Reallocator* is:

(1) a *Registered Participant* for the purposes of rules 2.5B(b)(3), 2.9, 2.10, 2.11, 8.2 and 8.9;

(2) taken to be a *Market Participant* for the purposes of rules 3.3 and 3.15 but is not regarded as a *Market Participant* for the purposes of clauses 3.3.2(a) and 3.15.1(b); and

(3) entitled to receive any information *AEMO* is required to *publish* or otherwise make available to *Registered Participants* (other than *confidential information* in respect of other *Registered Participants*),

but is not otherwise a *Registered Participant* or a *Market Participant* for the purposes of the *Rules* unless the person is also registered in another category of *Registered Participant* or *Market Participant*.

(c) To be eligible for registration as a *Reallocator*, a person must be a "wholesale client", as that term is defined in section 761G(4) of the *Corporations Act 2001* of the Commonwealth.

2.6 Special Participant

(a) *A Special Participant* is a person who is either of the following:

(1) *System Operator*: - an agent engaged, or a delegate appointed, by *AEMO* under clause 4.3.3 to carry out some or all of *AEMO's* rights, functions and obligations under Chapter 4.

(2) *Distribution System Operator*: - a person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies).

(b) A person must be registered by *AEMO* in this category to perform these functions.

2.7 Intention to Commence Activities or Functions

(a) Any person intending to act in any *Registered Participant* category may, on application for registration by that person in accordance with rule 2.9, be registered by *AEMO* as an *Intending Participant* if that person can reasonably satisfy *AEMO* that it intends to carry out an activity in respect of which it must or may be registered as a *Registered Participant*.

(b) *AEMO* may from time to time require a person registered by *AEMO* as an *Intending Participant* to satisfy *AEMO* that it continues to meet the criteria for registration in rule 2.7(a). If the *Intending Participant* is unable to satisfy *AEMO* that it continues to meet those criteria then it will cease to be registered as an *Intending Participant* on the date specified by *AEMO* by written notice to the *Intending Participant* concerned.

(c) An *Intending Participant* is taken to be an *Intending Participant* only in so far as its activities relate to its intention to commence an activity in respect of which it must or may be registered as a *Registered Participant*.

(d) As a *Registered Participant*, an *Intending Participant* may exercise such rights and is bound by such obligations under the *Rules* as are specified by *AEMO* (on the basis of whether the *Intending Participant* intends to become a *Customer*, *Generator*, *Network Service Provider* or *Special Participant*) and approved by the *AEMC*.

2.8 Registered Participant Rights and Obligations

2.8.1 Rights and obligations

(a) A *Registered Participant* must not act in any one of the categories listed in rules 2.2 to 2.7 unless the *Registered Participant* is registered by *AEMO* in that category in accordance with the requirements of the *Rules*.

(a1) A *Registered Participant* must comply with the provisions of the *Rules* applicable to that *Registered Participant*.

(b) A *Registered Participant* may act in more than one of the categories described in rules 2.2 to 2.7 provided that the *Registered Participant* is registered by *AEMO* in relation to each of the relevant *Registered Participant* categories.

2.9 Application to be Registered as a Registered Participant

2.9.1 Applications for Registration

(a) Applications to be registered in any category of *Registered Participant* must be submitted to *AEMO* in the form prescribed by *AEMO*.

(b) *AEMO* must, within 5 *business days* of receiving an application, advise the applicant of any further information or clarification which is required in support of its application if, in *AEMO's* reasonable opinion, the application:

(1) is incomplete; or

(2) contains information upon which *AEMO* requires clarification,

(c) If the further information or clarification required pursuant to clause 2.9.1(b) is not provided to *AEMO's* satisfaction within 15 *business days* of the request, the person will be deemed to have withdrawn the application.

2.9.2 Registration as a Registered Participant

(a) In this clause 2.9.2:

receiving date means the later date of *AEMO* receiving:

(1) an application for registration referred to in clause 2.9.1;

(2) further information or clarification referred to in clause 2.9.1(b); or

(3) in relation to an application for registration as a *Generator*, the information requested under clause S5.2.4(b).

(b) *AEMO* must, within 15 *business days* of the receiving date, determine that an applicant is to be registered in the category of *Registered Participant* applied for if *AEMO* is reasonably satisfied that:

(1) the applicant meets the eligibility requirements specified for the category of *Registered Participant* to which the application relates;

(2) if the application relates to registration in one of the categories of *Market Participant*, the applicant is and will be able to fulfil the applicable financial obligations under Chapter 3 of the *Rules*; and

(3) the applicant has demonstrated an ability to comply with the *Rules*.

(c) If *AEMO* determines that an applicant does not satisfy the requirements referred to in paragraph (b), *AEMO* must determine that the applicant is not qualified to be registered as a *Registered Participant* in the relevant category and provide reasons for that determination.

2.9.3 Registration as an Intermediary

(a) A person (the *"applicant"*) who is required to be registered under the *National Electricity Law* or under the *Rules* as a *Generator* or a *Network Service Provider* may apply to *AEMO* or the *AER* respectively for an exemption from that requirement to register.

(b) *AEMO* or the *AER* (as the case may be) must allow that exemption if:

(1) the *applicant* notifies *AEMO* or the *AER* (as the case may be) of the identity of a person (an *"intermediary"*) to be registered instead of the *applicant;*

(2) the *applicant* provides *AEMO* or the *AER* (as the case may be) with the written consent of the *intermediary* to act as *intermediary* in a form reasonably acceptable to *AEMO* or the *AER;* and

(3) **[Deleted]**

(4) *AEMO* or the *AER* (as the case may be) notifies the *applicant* that it approves of the *intermediary.*

(c) *AEMO* or the *AER* (as the case may be) must approve an *intermediary* if the *applicant* establishes to *AEMO's* reasonable satisfaction that, from a technical perspective, the *intermediary* can be treated for the purpose of the *Rules* as the *applicant* with respect to the relevant *generating system, distribution system* or *transmission system* with which the *applicant* is associated.

(d) If the exemption is granted by *AEMO* or the *AER* (as the case may be) then:

(1) provided the *intermediary* satisfies all relevant registration requirements that the *applicant* would have been required to satisfy, *AEMO* must register the *intermediary* as a *Registered Participant* as if it were the *applicant;*

(2) the *intermediary* will be considered for the purposes of the *Rules* to be the *applicant;*

(3) all references in the *Rules* to the *applicant* will be deemed to be references to the *intermediary* (unless the context requires otherwise);

(4) all acts, omissions, statements, representations and notices of the *intermediary* in its capacity as a *Registered Participant* under the *Rules* will be deemed to be the acts, omissions, statements, representations and notices of the *applicant;*

(5) the *intermediary* and the *applicant* will be jointly and severally liable for the acts, omissions, statements, representations and notices of the *intermediary* in its capacity as a *Registered Participant* under the *Rules;* and

(6) *AEMO* or any other *Registered Participant* may fulfil any obligations to the *applicant* under the *Rules* by performing them in favour of the *intermediary.*

(e) The *applicant* may revoke the appointment of the *intermediary* by giving notice of such revocation to *AEMO*, whereupon *AEMO* must advise the *AER* that such notice has been given.

(f) At 4.30 am, 2 *business days* after *AEMO* receives notice of such revocation, the *intermediary* will cease to be considered the *applicant's intermediary* for the purposes of the *Rules* and the *applicant* will not be liable under clause

2.9.3(d)(5) for any acts, omissions, statements, representations or notices of the *intermediary* occurring after that time.

(g) If the *applicant* revokes the appointment of an *intermediary*, the exemption granted by *AEMO* or the *AER* (as the case may be) to the *applicant* as contemplated by clause 2.9.3(b) ceases at the time the *intermediary* ceases to be the *applicant's intermediary* in accordance with clause 2.9.3(f).

(h) The *applicant* may notify *AEMO* or the *AER* (as the case may be) that the *intermediary* is the *applicant's intermediary* for part only of the *applicant's* business (provided that that part represents one or more discrete *generating systems, distribution systems* or *transmission systems).*

(i) Nothing in the *Rules* requires the *intermediary* to be the agent of the *applicant.*

2.9A Transfer of Registration

2.9A.1 Definitions

In this rule 2.9A:

Transferor means a *Registered Participant* wishing to transfer its registration to another person in accordance with rule 2.9A.

Transferee means the person to whom a *Registered Participant* wishes to transfer its registration in accordance with rule 2.9A.

2.9A.2 Applications for Transfer of Registration

(a) If a Transferor wishes to transfer its registration to the Transferee, then the Transferor and Transferee must apply to *AEMO* for approval to do so.

(b) An application under clause 2.9A.2(a) must be submitted to *AEMO* by the Transferor and Transferee in the form prescribed by *AEMO.*

(c) *AEMO* must, within 5 *business days* of receiving an application under clause 2.9A.2(a), advise the Transferor and Transferee of any further information or clarification which is required in support of its application if, in *AEMO*'s reasonable opinion, the application:

(1) is incomplete; or

(2) contains information upon which *AEMO* requires clarification.

(d) If the further information or clarification required pursuant to clause 2.9A.2(c) is not provided to *AEMO*'s satisfaction within 15 *business days* of the request, then the Transferor and Transferee will be deemed to have withdrawn the application.

2.9A.3 Approval for Transfer of Registration

(a) *AEMO* must, within 15 *business days* of receiving an application under clause 2.9A.2(a), determine to transfer the registration if *AEMO* is reasonably satisfied that:

(1) the Transferor is not in breach of any of its obligations under the *Rules*;

(2) with the exception of any requirements that apply to the classification of *facilities* to which the application relates, the Transferee meets the eligibility requirements specified in the *Rules* for the category of *Registered Participant* to which the application relates;

(3) the classification of the *facilities* to which the application relates has previously been approved by *AEMO* in accordance with the *Rules*;

(4) the *performance standards* applicable to the *facilities* to which the application relates have previously been registered by *AEMO* in accordance with the *Rules*;

(5) if the application relates to the transfer of a registration in one of the categories of *Market Participant*, the Transferee is and will be able to fulfil the applicable financial obligations under Chapter 3 of the *Rules*; and

(6) the Transferee has demonstrated an ability to comply with the *Rules*.

(b) If *AEMO* approves the application, then *AEMO* may impose such terms and conditions as *AEMO* considers appropriate, or vary the terms and conditions of the registration on its transfer.

(c) If *AEMO* determines that the application does not satisfy any of the requirements referred to in clause 2.9A.3(a), *AEMO* must reject the application and provide reasons in writing to the Transferor and Transferee for that rejection.

2.10 Ceasing to be a Registered Participant

2.10.1 Notification of intention

(a) A person may notify *AEMO* in writing that it wishes to cease to be registered in any category of *Registered Participant* or that it wishes to terminate any of its classifications of *loads, generating units* or *network services*.

(b) A person is not entitled to notify *AEMO* that it wishes to cease to be registered in relation to any category for which that person is required to be registered under the *National Electricity Law* or under the *Rules*.

(c) In any notice given under clause 2.10.1(a), the *Registered Participant* must specify a date upon which it wishes to cease to be so registered or for an existing classification to be terminated and, in the case of a *Market Participant,* the date upon which it will cease to *supply* or acquire electricity or trade

directly in the *market* and whether entirely or in relation to one or more *connection points* or *market network services*.

(d) *AEMO* may reject a notice from a *Market Customer* that it wishes to terminate its classification of a *connection point* as one of its *market loads* or otherwise cease to be a *Market Customer* in relation to any of its *market loads* unless *AEMO* is satisfied that:

(1) another person has classified the *connection point* as one of its *market loads* and is registered as a *Market Customer;*

(2) the relevant *Local Retailer* has agreed or is otherwise required by laws of the relevant *participating jurisdiction* to assume responsibility for payments to *AEMO* for electricity supplied to that *connection point;* or

(3) the *load* at that *connection point* will be *disconnected* on and from the date specified and, taking into consideration any relevant guidelines and procedures specified by the relevant *participating jurisdiction* to *AEMO,* that *disconnection* is not inappropriate.

(e) Upon receiving a notice which complies with clause 2.10.1 from a person who wishes to cease to be registered in any category of *Market Participant*, or to terminate the classification of any of its *market loads, market generating units,* or *market network services, AEMO* must deliver a notice to the *AER* and the *AEMC* and notify all *Registered Participants* stating that:

(1) *AEMO* has received a notice under clause 2.10.1(a); and

(2) the person who gave the notice has stated that, from the date specified in the notice, the person intends to cease *supplying* or acquiring electricity or trading directly in the *market* and whether entirely or in relation to certain *connection points* or *market network services*.

2.10.2 Ceasing Participation

(a) A *Market Participant* must cease all trading in the *market* as specified in a notice that is properly given under clause 2.10.1(a) and is not rejected under clause 2.10.1(d).

(b) A person ceases to be a *Registered Participant* for the purposes of the *Rules* when all payments due to be paid to or by it under the *Rules* have been made.

(c) The fact that a person has ceased to be registered in any category of *Registered Participant* or has terminated any classifications contemplated under this Chapter does not affect any obligation or liability of that person under the *Rules* which arose prior to the cessation of its registration or the termination of the classification.

2.10.3 Liability after cessation

A *Registered Participant* which is subject to a liability under the *Rules* remains subject to that liability after and despite ceasing to be a *Registered Participant* regardless of when the claim is made.

2.11 Participant Fees

2.11.1 Development of Participant fee structure

(a) *AEMO* must develop, review and publish, in consultation with *Registered Participants* and *interested parties* and such other persons as *AEMO* thinks appropriate, in accordance with the *Rules consultation procedures*, the structure (including the introduction and determination) of *Participant fees* for such periods as *AEMO* considers appropriate.

(ab) In determining *Participant fees*, *AEMO* must have regard to the *national electricity objective*.

(b) The structure of *Participant fees* must, to the extent practicable, be consistent with the following principles:

(1) the structure of *Participant fees* should be simple;

(2) *Participant fees* should recover the budgeted revenue requirements for *AEMO* determined under clause 2.11.3 on a basis where:

(i) the following principles are relevant to the recovery of recurrent expenditure:

(A) if *AEMO* recovers an excess of revenue over expenditure from the provision of a particular service in a financial year, it may roll over the excess to a later financial year (or later financial years) so as to reduce revenue requirements in the later financial year (or years);

(B) *AEMO* may recover a shortfall of revenue as against expenditure for the provision of a particular service in a later financial year or later financial years;

(C) *AEMO* may take any other action it considers desirable to smooth the impact of actual or anticipated cost variations on the users of a service provided by *AEMO*;

(ii) capital expenditures (incurred after *market commencement*) are recovered through the depreciation or amortisation of the assets acquired by the capital expenditure in a manner that is consistent with generally accepted accounting principles;

(iii) costs of transition are recovered over a period of 4 years from the *changeover date*.

(iv) notwithstanding clauses 2.11.1(b)(2)(i), (ii) and (iii), expenditure incurred by, and depreciation and amortisation charged to, *AEMO* associated with a *declared NEM project* are recovered from the start date and over the period determined for that *declared NEM project* under clauses 2.11.1(bb) or 2.11.1(bd). Amounts

associated with a *declared NEM project* determined in accordance with this clause are to be recovered through an additional *Participant fee* determined in accordance with clauses 2.11.1(bb) or 2.11.1(bd) until the next general determination of all *Participant fees* is made under clause 2.11.1(a);

(3) the components of *Participant fees* charged to each *Registered Participant* should be reflective of the extent to which the budgeted revenue requirements for *AEMO* involve that *Registered Participant*;

(4) *Participant fees* should not unreasonably discriminate against a category or categories of *Registered Participants*; and

(5) the fixed component of *Participant fees* for a *Market Customer* who:

(i) is registered with *AEMO* solely for the purpose of providing *market ancillary services*; and

(ii) does not classify any of its *market loads* as a *scheduled load*,

may be zero.

(ba) *AEMO* may determine any of the following projects to be a *declared NEM project*:

(1) a major reform or development (including an anticipated reform or development) of the *market*; or

(2) a major change (including an anticipated change) to a function, responsibility, obligation or power of *AEMO* under the *Rules*; or

(3) a major change (including an anticipated change) to any of the computer software or systems that *AEMO* uses in the performance of any of its functions, responsibilities, obligations or powers under the *Rules.*

(bb) When *AEMO* determines a project to be a *declared NEM project* under clause 2.11.1(ba), it must also determine the start date for recovery and the period or periods over which recovery will occur for the *declared NEM project*. *AEMO* must also determine the structure of an additional *Participant fee* to be used in the recovery of costs associated with a *declared NEM project* until the next general determination of all *Participant fees* is made under clause 2.11.1(a).

(bc) In making determinations under clauses 2.11.1(ba) and (bb), *AEMO* must comply with the *Rules consultation procedures*.

(bd) The introduction and facilitation of full retail competition is taken to have been determined to be a *declared NEM project* under clause 2.11.1(ba) and *AEMO* will be entitled to recover through *Participant fees* expenditure incurred by, and depreciation and amortisation charged to, *AEMO* in respect of full retail competition. The period or periods over which recovery will occur for this *declared NEM project* will be determined by *AEMO* using the *Rules consultation procedures.* If any amounts associated with the introduction and facilitation of full retail competition are to be recovered prior to the next

general determination of all *Participant fees* under clause 2.11.1(a), such recovery must be through an additional *Participant fee* determined using the *Rules consultation procedures.*

(c) The components of the *Participant fees* may include, but are not limited to:

(1) registration fees, comprising an annual fee payable by each person for each *Registered Participant* category in which they are registered;

(2) *ancillary service fees*, to recover *AEMO's* budgeted revenue requirements in relation to its procurement of *non-market ancillary services*;

(3) *power system* operations fees, to recover *AEMO's* budgeted revenue requirements in relation to its *power system* operation activities described in clause 2.11.3(b)(2);

(4) *metering* fees to recover *AEMO's* budgeted revenue requirements for the collection, storage and processing of *metering data*;

(5) billing and *settlements* fees, to recover *AEMO's* budgeted revenue requirements as described in clause 2.11.3(b)(4); and

(5A) *NTP function* fees to recover *AEMO*'s budgeted revenue requirement as described in clause 2.11.3(b)(4A);

(5B) *additional advisory function* fees to recover *AEMO*'s budgeted revenue requirement as described in clause 2.11.3(b)(4B);

(6) administration fees, to recover the remainder of *AEMO's* budgeted revenue requirements;

and each component of the *Participant fees* may take into account adjustments which may be appropriate in light of the matters described in clauses 2.11.3(b)(7) or (8).

(d) In undertaking the process described in clause 2.11.1(a) *AEMO* must consider other fee structures in existence which it thinks appropriate for comparison purposes.

(e) *AEMO* must publish to *Registered Participants* and to such other persons as *AEMO* thinks appropriate, the structure of *Participant fees* determined, the methods used in determining the structure and an assessment of the extent to which the structure complies with the principles set out in clause 2.11.1(b) at least 3 months prior to the implementation of the structure.

2.11.2 Payment of Participant fees

(a) *AEMO* may charge a *Registered Participant* the relevant components of *Participant fees* in accordance with the structure of *Participant fees* by giving the *Registered Participant* a statement setting out the amount payable by that *Registered Participant* and the date for payment.

(b) In the case of a *Market Participant*, *AEMO* may, alternatively, include the relevant amount in the statements described in clause 3.15.15.

(c) A *Registered Participant* must pay to *AEMO* the net amount stated to be payable by that *Registered Participant* in a statement issued under clause 2.11.2(a) or in accordance with clause 2.11.2(b) to meet *AEMO's* budgeted revenue requirements by the date specified for payment, whether or not the *Registered Participant* disputes the net amount payable.

2.11.3 Budgeted revenue requirements

(a) *AEMO* must prepare and *publish* before the beginning of each *financial year* a budget of the revenue requirements for *AEMO* for that *financial year.*

(b) The budget prepared by *AEMO* under clause 2.11.3(a) must take into account and separately identify projected revenue requirements in respect of:

(1) *AEMO's* procurement of *non-market ancillary services*;

(2) *AEMO's* expenditures in relation to its *power system* operation activities, including meeting its obligations in terms of *power system security* and the facilitation and operation of the central bidding and dispatch processes in accordance with the *Rules;*

(2A) *AEMO's* expenditures in relation to *inter-network tests*;

(3) *AEMO's* expenditures in the collection, storage and processing of *metering data;*

(4) *AEMO's* expenditures in the facilitation of the billing and *settlement* of *market transactions*;

(4A) *AEMO*'s expenditures in carrying out *NTP functions*;

(4B) *AEMO's* expenditures in carrying out *additional advisory functions*;

(5) *AEMO*'s other expenditure requirements, operating costs and margin so far as they relate to the electricity industry;

(5A) the proportion of *AEMO*'s residual expenditures allocated to the electricity industry under paragraph (c).

(6) *AEMO's* consumer advocacy funding obligation under rule 8.10;

(7) any revenue shortfall or excess from each of the requirements specified under clause 2.11.3(b)(1)-(5) from the previous *financial year*; and

(8) the funding requirements of the *Participant compensation fund* in accordance with rule 3.16 (which requirements must only be recovered from *Scheduled Generators*, *Semi-Scheduled Generators* and *Scheduled Network Service Providers*).

(c) *AEMO* must allocate expenditures that cannot be specifically related to electricity activities or gas activities (**residual expenditures**) between the electricity and gas industries in a manner that:

(1) ensures that the total amount of the residual expenditures is allocated appropriately between the electricity and the gas industries; and

(2) ensures that each industry bears an allocation at least equal to the amount by which residual expenditures would be reduced if services were no longer provided to that industry; and

(3) promotes the efficient use of electricity and gas services.

(d) *AEMO*'s expenditures in carrying out *declared network functions* are to be recovered through fees charged as a *Transmission Network Service Provider* and not through *participant fees*.

2.12 Interpretation of References to Various Registered Participants

(a) A person may register in more than one of the categories of *Registered Participant.*

(b) Notwithstanding anything else in the *Rules*, a reference to:

(1) a "*Generator*" applies to a person registered as a *Generator* only in so far as it is applicable to matters connected with the person's *scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units* or *non-market generating units*;

(2) a "*Scheduled Generator*", "*Semi-Scheduled Generator*", "*Non-Scheduled Generator*", "*Market Generator*" or "*Non-Market Generator*" applies to a person only in so far as it is applicable to matters connected with the person's *scheduled generating units*, *semi-scheduled generating units*, *non-scheduled generating units, market generating units* or *non-market generating units* respectively;

(3) a "*Customer*" applies to a person registered as a *Customer* only in so far as it is applicable to matters connected with the person's *first-tier loads, second-tier loads* or *market loads*;

(4) a "*First Tier Customer*", "*Second Tier Customer*" or "*Market Customer*" applies to a person only in so far as it is applicable to matters connected with the person's *first-tier loads*, *second-tier loads* or *market loads* respectively;

(4A) a "*Trader*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Trader*;

(4B) a "*Reallocator*" applies to a person only in so far as it is applicable to matters connected with the person's activities as a *Reallocator*;

(5) a *"Network Service Provider"* applies to a person registered as a *Network Service Provider* only in so far as it is applicable to matters connected with the person's *network services,* including *market network services* and *scheduled network services;*

(6) a "*Market Network Service Provider"* or "*Scheduled Network Service Provider"* applies to a person only in so far as it is applicable to matters connected with the person's *market network services* or *scheduled network services* respectively;

(7) a "*Market Participant"* applies to a person who is a *Market Participant* and:

(i) where that person is registered as a *Market Generator*, in so far as it is applicable to matters connected with the person's *market generating units* or *ancillary services generating units;* and

(ii) where that person is registered as a *Market Customer,* in so far as it is applicable to matters connected with the person's *market loads* or *market ancillary service loads*; and

(iii) where that person is registered as a *Market Network Service Provider*, in so far as it is applicable to matters connected with the person's *market network services*; and

(iv) where that person is registered in any category of *Market Participant* additional to a *Market Generator* and/or a *Market Customer* and/or a *Market Network Service Provider*, to the extent to which the reference would otherwise apply to the person if it were not taken to be a *Market Generator*, *Market Customer* or *Market Network Service Provider;* and

(8) a "*Registered Participant*" applies to a person who is registered under Chapter 2 and:

(i) where that person is registered as a *Generator,* in so far as it is applicable to matters connected with any of the *Generator's scheduled generating units, semi-scheduled generating units, non-scheduled generating units, market generating units* and *non-market generating units*;

(ii) where that person is registered as a *Customer*, in so far as it is applicable to matters connected with any of the *Customer's first-tier loads, second-tier loads* or *market loads*; and

(iii) where that person is registered in any other *Registered Participant* category, to the extent to which the reference would apply to the person if it were not registered in another *Registered Participant* category.

(c) In rule 2.12, "matter" includes any assets, liabilities, acts, omissions or operations (whether past, present or future).

CHAPTER 2A

2A. Regional Structure

Part A – Region change applications and region determinations by AEMC

2A.1 Introduction to Chapter 2A

2A.1.1 Definitions

Expressions in Chapter 2A are defined in Schedule 2A.1.

2A.1.2 AEMC determination of regions

(a) For the purpose of conducting the *spot market*, the *market* is to be divided into *region*s determined by the *AEMC* in accordance with the *Rules*.

(b) A *region* change may only be made by a *region* change application to the *AEMC* in accordance with this Chapter 2A.

(c) Until the *AEMC* makes a *region* change in accordance with this Chapter 2A, for the purposes of the *Rules*, the *regions* are taken to be the *regions* defined in the *Regions Publication published* under clause 2A.1.3

2A.1.3 Publication of regions by AEMO

AEMO must maintain, review and, by 1 April each year, *publish* a list of all *regions, regional reference nodes* and the *region* to which each *market connection point* is assigned as determined or approved by the *AEMC* for alteration, under this Chapter 2A and rule 3.6 ('the *Regions Publication*').

2A.2 Region change applications

2A.2.1 A complete region change application

(a) Subject to and in accordance with this Chapter 2A, a *Registered Participant* or *AEMO (*"an **applicant**") may make a *region* change application to the *AEMC*.

(b) In order to be accepted by the *AEMC*, a *region* change application must comply with the requirements under this rule 2A.2 ("a **complete application"**).

(c) In order to be a complete application, a *region* change application must:

(1) identify a congestion problem – see clause 2A.2.2;

(2) present a preliminary case as to the economic efficiency of a proposed *region* solution – see clause 2A.2.3;

(3) propose a *region* solution to the congestion problem that is technically competent – see clause 2A.2.4;

(4) demonstrate that the proposed *region* solution is appropriate having regard to alternative means for managing the congestion problem – see clause 2A.2.5;

(5) if the congestion problem has been considered within 5 years of the date of the *region* change application, demonstrate why it should be re-considered – see clause 2A.2.6; and

(6) propose an implementation period.

2A.2.2 Identifying a congestion problem

A *region* change application must demonstrate, with supporting economic analysis:

(1) that there is a problem with the existing *region* configuration;

(2) that the problem is attributable to the presence of material and enduring *network* congestion; and

(3) that the problem has or will detract materially from economic efficiency, where economic efficiency includes (but is not limited to):

(i) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;

(ii) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the *spot market*; and

(iii) long term dynamic efficiency – including in relation to making investment decisions,

("a **congestion problem**").

2A.2.3 Explanation of economic efficiency of proposed region solution

(a) A *region* change application must explain how the proposed *region* solution would or would be likely to materially improve economic efficiency.

(b) For the purposes of paragraph (a), economic efficiency includes (but is not limited to):

(1) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;

(2) efficiency in relation to the management of risk and the facilitation of forward contracting through contracts in the financial markets and the *spot market*; and

(3) long term dynamic efficiency – including in relation to making investment decisions.

2A.2.4 Region change application must be technically competent

A *region* change application must:

(1) demonstrate that the proposed *region* solution identified in the application satisfies the following technical requirements:

(i) each *region* must have a single *regional reference node* which is to be deemed to be a notional *busbar* at:

(A) a nominated major *transmission substation* located at or close to the largest *load centre* within the *region*; or

(B) where a *region* has no major *load centre* or there is some other reasonable cause for not defining a *regional reference node* at a particular major *load centre*, a nominated major *transmission substation* located at or close to the largest *generation centre* within the *region*;

(ii) all *transmission connection points* affected by a proposed *region* solution must be identified;

(iii) a *transmission connection point* may only be assigned to a single *region*;

(iv) the boundary of a *region* must be closed and must enclose at least one significant *load centre* and/or *generation centre*;

(v) the physical *transmission elements* that form the *interconnection* with adjacent *regions* must be described, including the points at which the boundary cuts through the *transmission elements*; and

(vi) the availability of revenue metering to measure the *energy* flow across each physical *transmission element* that forms the *interconnection* with other *regions*; and

(2) where the application proposes an implementation period that is more or less than 3 years, specify the proposed implementation period and provide reasons why a different time period should be determined by the *AEMC*,

("a **technically competent application**").

2A.2.5 Alternative congestion management options

(a) A *region* change application must demonstrate that the *region* solution proposed in the application is an appropriate and timely course of action in all the circumstances, having regard to alternative means of managing the congestion problem ("the **alternative congestion management options**").

(b) The alternative congestion management options include:

(1) changes to the geographic distribution of *generation* and *load* over time;

(2) changes in the configuration of the *transmission network* such as a change which is a consequence of the application of the *last resort planning power* regime; or

(3) changes in capability of the *transmission network* arising under other arrangements such as *network* support agreements or *network control ancillary services* agreements.

2A.2.6 Previous application relating to congestion problem

Where a *region* change application ("a **subsequent application**") addresses the same or substantially the same congestion problem as a previous *region* change application accepted by the *AEMC* within the previous 5 year period, the subsequent application must demonstrate, with supporting evidence, why it is appropriate for the *AEMC* to accept a subsequent application having regard to:

(1) any material changes in circumstances since the previous *region* change application;

(2) the general desirability of a stable *region* structure for the making of contracting and investment decisions:

(i) in the *NEM*; and

(ii) in financial markets;

(3) the adequacy of the previous application; and

(4) any other relevant consideration in the particular circumstances of the case.

2A.2.7 AEMO to provide information to intending applicants

(a) An intending applicant (other than *AEMO*) or an alternative proponent may request information from *AEMO* in order to prepare a technically competent application.

(b) A person making a request to *AEMO* under paragraph (b) must include in the request details of the information sufficient for *AEMO* to identify the information sought.

(c) Subject to paragraph (d), *AEMO* must on request from an intending applicant or an alternative proponent, as soon as practicable after receiving the request, furnish to the relevant person, such information that is:

(1) requested in accordance with paragraphs (a) and (b); and

(2) in *AEMO's* possession or provided to *AEMO* under paragraph (c).

(d) For the purpose of furnishing information under paragraph (c), *AEMO* may direct a *Transmission Network Service Provider* to provide information to *AEMO* and the *Transmission Network Service Provider* must provide that information to *AEMO* as soon as reasonably practicable.

(e) Information that *AEMO* is required to furnish under paragraph (c) does not include information that *AEMO* may be directed to provide under clause 2A.5.2.

(f) *AEMO* must *publish*:

(1) requests made to *AEMO* under paragraph (a);

(2) information (excluding *confidential information*) provided by *AEMO* in accordance with paragraph (b); and

(3) details of the circumstances where *AEMO* has not provided information in accordance with paragraph (d),

as soon as practicable.

2A.2.8 AEMC may refuse to accept incomplete applications

If the *AEMC* considers that a *region* change application is not a complete application under this rule 2A.2, the *AEMC*:

(1) must notify the applicant, including written reasons that set out the respects in which the application is not complete; and

(2) is not required to further consider the application until it is satisfied that the application is a complete application.

2A.3 Acceptance of region change application by AEMC

2A.3.1 Acceptance of a region change application by AEMC

(a) The *AEMC* must not accept a *region* change application unless it is satisfied that the application is a complete application in accordance with rule 2A.2.

(b) Where the *AEMC*:

(1) is not satisfied that a *region* change application is a complete application in accordance with rule 2A.2; or

(2) considers, whether as a result of submissions received in preliminary consultation under clause 2A.3.2 or otherwise, that a *region* change application should not proceed,

it may make a decision not to accept the *region* change application, setting out the reasons for that decision.

(c) The *AEMC* must, without delay, notify the applicant of a decision not to accept a *region* change application, and publish that decision (including the reasons) on the *AEMC's* website.

(d) Where the *AEMC* is satisfied that a *region* change application:

(1) is a complete application in accordance with rule 2A.2;

(2) satisfactorily addresses any issues raised by preliminary consultation under clause 2A.3.2; and

(3) should, in all the circumstances, be the subject of consultation and considered under this Chapter 2A,

the *AEMC* must make a decision to accept a *region* change application and must take action in relation to the application in accordance with this Chapter 2A.

(e) An applicant may not withdraw a *region* change application after the *AEMC* has accepted that application and has published a first round consultation notice under clause 2A.4.1.

2A.3.2 Preliminary consultation prior to acceptance of a region change application

(a) After the *AEMC* decides that a *region* change application is a complete application in accordance with rule 2A.2, but prior to making a decision whether or not to accept the application under clause 2A.3.1, the *AEMC* must publish the proposed *region* change application (including all supporting evidence) on its website and invite written submissions from any person within 21 *business days* of the date of that publication.

(b) The *AEMC* is not required to publish *confidential information* provided to it under this clause.

(c) Where the *AEMC* considers that submissions received under paragraph (a) raise issues that should be addressed in the *region* change application, it may:

(1) request the applicant to amend the *region* change application to address those issues; or

(2) decide not to accept the *region* change application under clause 2A.3.1.

2A.4 First round consultation on region change application

2A.4.1 Notice of first round consultation

(a) As soon as practicable after accepting a *region* change application under clause 2A.3.1(d), the *AEMC* must publish on its website notice of the application ("the **first round consultation notice**").

(b) Subject to clause 2A.3.2(b), the first round consultation notice must:

(1) contain the *region* change application and supporting evidence provided by the applicant;

(2) invite written submissions from any person within 75 *business days* of the date of the first round consultation notice ("the **first round consultation period**");

(3) specify that a person may put forward an alternative *region* solution in a written submission either:

(i) as an informal alternative *region* solution; or

(ii) as a formal alternative *region* solution under clause 2A.4.3,

and (in the case referred to in subparagraph (ii)), the notice must further specify that the person may be required to provide to the *AEMC* supplementary economic analysis to support the formal alternative *region* solution; and

(4) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.4.2 Right to make written submissions during first round consultation period

Any person may, within the first round consultation period, make a written submission in relation to a *region* change application ("a **first round submission**").

2A.4.3 Alternative region solution put forward by third parties

(a) A person who makes a first round submission may propose an alternative *region* solution to the solution proposed in the *region* change application ("a **proposed alternative *region* solution**").

(b) A *Registered Participant* or *AEMO* ("an **alternative proponent**") who submits a proposed alternative *region* solution under paragraph (a) may request the *AEMC* to treat the solution as a formal alternative *region* solution by expressly requesting the *AEMC* to do so in the first round submission.

(c) A proposed alternative *region* solution submitted by an alternative proponent under paragraph (b) must:

(1) demonstrate that the proposed alternative *region* solution relates to the congestion problem identified in the *region* change application and accepted by the *AEMC* under clause 2A.3.1;

(2) meet the requirements of a technically competent application in accordance under clause 2A.2.4; and

(3) explain how the proposed alternative *region* solution would or would be likely to materially improve economic efficiency in accordance with the requirements for a *region* change application under clause 2A.2.3,

("a **complete alternative *region* solution**").

2A.4.4 Acceptance as a formal alternative region solution by AEMC

(a) The *AEMC* is not obliged to treat a proposed alternative *region* solution as a formal alternative *region* solution unless the *AEMC* is satisfied that it is a complete alternative *region* solution.

(b) Where the *AEMC* is not satisfied that a proposed alternative *region* solution is a complete alternative *region* solution, the *AEMC* must decide not to treat it as a formal alternative *region* solution and must:

(1) set out the reasons for that decision;

(2) without delay, notify the alternative proponent of the decision;

(3) publish the decision (including the reasons) on the *AEMC's* website; and

(4) treat the proposed alternative *region* solution as an informal alternative *region* solution.

(c) Where the *AEMC* is satisfied that a proposed alternative *region* solution is a complete alternative *region* solution, the *AEMC* must:

(1) publish the proposed alternative *region* solution as a formal alternative *region* solution on its website as soon as practicable after accepting the solution as a formal alternative *region* solution; and

(2) treat the proposed alternative *region* solution as a formal alternative *region* solution.

(d) An alternative proponent may not withdraw a proposed alternative *region* solution after the *AEMC* has published it as a formal alternative *region* solution under paragraph (c)(1).

2A.5 Provision of supplementary economic analysis

2A.5.1 AEMC may direct provision of supplementary analysis

(a) The *AEMC* may, in respect of a *region* change application accepted under rule 2A.3, direct an applicant to provide to the *AEMC* supplementary economic analysis to support the applicant's proposed *region* solution within a specified time.

(b) The *AEMC* may, in respect of a formal alternative *region* solution, direct an alternative proponent to provide to the *AEMC* supplementary economic analysis to support the alternative *region* solution within a specified time.

(c) An applicant or an alternative proponent directed under paragraphs (a) or (b) must provide the supplementary economic analysis to the *AEMC* within the period of time specified by the *AEMC* in the direction.

(d) A direction under paragraphs (a) or (b) may be given at any time after the start of the first round consultation period.

(e) Despite paragraphs (a) to (c), the *AEMC* or its *representative* may prepare supplementary economic analysis in respect of a *region* solution, whether proposed in a *region* change application, or in a formal alternative *region* solution or otherwise.

2A.5.2 AEMC may direct AEMO to provide information

(a) Where the *AEMC:*

(1) directs an applicant or an alternative proponent to provide supplementary economic analysis under clause 2A.5.1; or

(2) decides that it or its *representative* will prepare supplementary economic analysis under clause 2A.5.1(e),

the *AEMC* may request *AEMO* to provide information (including *constraint* equations) to the applicant or to the alternative proponent, or directly to the *AEMC* (as the case may be), but only where such information is necessary to facilitate the provision of supplementary economic analysis to those persons or to the *AEMC*.

(b) Where the *AEMC* requests *AEMO* to provide information under paragraph (a), *AEMO* must provide the information to the applicant, to the alternative proponent, or directly to the *AEMC* (as the case may be), as soon as practicable in all the circumstances.

(c) *AEMO* may, in respect of a *constraint* on a *network*, direct the *Transmission Network Service Provider* who owns, controls or operates the relevant *network* to provide information to *AEMO* for the purpose referred to in paragraph (a) and the *Transmission Network Service Provider* must provide that information to *AEMO* as soon as reasonably practicable.

(d) *AEMO* must *publish*:

(1) requests made to *AEMO* under paragraph (a); and

(2) information (excluding *confidential information*) provided by *AEMO* in accordance with paragraph (b),

as soon as practicable.

(e) The *AEMC* is not required to publish information provided to the *AEMC* under this clause 2A.5.2 that has been obtained by the applicant or alternative proponent in accordance with clause 8.6.2(o).

2A.6 Region determinations

2A.6.1 AEMC powers to make a region determination

(a) In making a *region* determination in respect of a *region* change application, the *AEMC* may:

(1) accept or reject the *region* solution proposed in the application;

(2) accept or reject a formal alternative *region* solution;

(3) determine that no *region* change should be made;

(4) determine a *region* solution that is different (including materially different) from the *region* solution proposed in the application; or

(5) determine a *region* solution that is different (including materially different) from a formal alternative *region* solution.

(b) In making a decision under paragraph (a), the *AEMC* may, subject to this rule 2A.6, adopt the *region* solution that it considers provides the best available solution to the congestion problem identified in the *region* change application in all the circumstances.

2A.6.2 Matters for consideration in making region determination

In making a *region* determination to adopt a *region* solution, the *AEMC* must be satisfied:

(1) that there is a problem with the existing *region* configuration which is attributable to the presence of material and enduring *network* congestion ("a **congestion problem**");

(2) that the *region* solution is technically competent in accordance with the requirements of clause 2A.2.4;

(3) that:

(i) the congestion problem will detract materially from economic efficiency; and

(ii) the *region* solution will materially improve economic efficiency, where economic efficiency includes (but is not limited to):

(iii) efficiency in relation to the impact on efficiency of *dispatch*, including in respect of bidding incentives and *dispatch* outcomes;

(iv) efficiency in relation to the management of risk and the facilitation of forward contracting in the financial markets and the *spot market*; and

(v) long term dynamic efficiency – including in relation to making investment decisions;

(4) that the *region* solution is an appropriate and timely course of action in all the circumstances, having regard to the alternative congestion management options;

(5) that the *region* solution is consistent with *power system security* and *reliability*; and

(6) where the proposed implementation is greater than or less than 3 years, that the implementation period is reasonable in all the circumstances of the *region* determination.

2A.7 Draft region determination and second round consultation

2A.7.1 Publishing of draft region determination

(a) Before making a final *region* determination, but within 60 *business days* of the end of the first round consultation period, the *AEMC* must publish a draft *region* determination in relation to an application.

(b) A draft *region* determination must contain:

(1) the reasons of the *AEMC* as to its decision, with reference to the matters set out in rule 2A.6; and

(2) a proposed implementation period.

2A.7.2 Second round consultation

(a) The *AEMC* must publish a notice on its website of a draft *region* determination on a complete application ("the **second round consultation notice**").

(b) A second round consultation notice must:

(1) contain the draft *region* determination;

(2) invite written submissions from any person within 60 *business days* of the date of the second round consultation notice ("the **second round consultation period**"); and

(3) include a statement to the effect that any interested party may request, in writing within one week after the publication of the notice, the *AEMC* to hold a consultation meeting in accordance with clause 2A.9.2.

2A.7.3 Right to make written submissions during second round consultation

Any person, within the second round consultation period, may make a written submission in relation to a draft *region* determination ("**second round submission**").

2A.8 Final region determination

2A.8.1 Final determination for region change

(a) The *AEMC* must publish on its website a final *region* determination in relation to a *region* change application within 40 *business days* of the end of the second round consultation period.

(b) A final *region* determination must contain:

(1) the reasons of the *AEMC* as to its decision with reference to the matters set out in rule 2A.6; and

(2) the implementation period.

2A.8.2 Formal publication of region determination

(a) If the *AEMC* in a final *region* determination determines to make a *region* change, the *AEMC* must publish a notice of the making of the *region* change in the South Australian Government Gazette and on its website.

(b) A notice referred to in paragraph (a) must include:

(1) the date of publication of the final *region* determination under clause 2A.8.1;

(2) the implementation period; and

(3) the start date.

2A.9 Miscellaneous matters for region change process

2A.9.1 AEMC may extend periods of time specified in Chapter 2A

(a) Despite anything to the contrary in this Chapter 2A, the *AEMC* may, by notice published on its website, extend a period of time specified in Chapter 2A, if the *AEMC* considers that a *region* change application raises issues of sufficient complexity or difficulty or there is a material change in circumstances such that it is necessary that the relevant period of time specified in Chapter 2A be extended.

(b) A notice under paragraph (a) must identify the period of time under Chapter 2A to be extended, and specify the new time that is to apply.

(c) The *AEMC* may only extend a period of time in accordance with this clause 2A.9.1 before the expiry of that time.

2A.9.2 Consultation meeting in relation to region change application

(a) Any person may request, in writing, within one week of the publication of a first round consultation notice or second round consultation notice (as the case may be), the *AEMC* to hold a consultation meeting in relation to a *region* change application or a draft *region* determination.

(b) Despite paragraph (a), the *AEMC* may decide not to hold a consultation meeting, and if so, must give the person who made the request its reasons, in writing, for declining to hold a consultation meeting.

(c) The *AEMC* may on its own initiative hold a consultation meeting.

(d) If the *AEMC* decides to hold a consultation meeting under this clause 2A.9.2, it must:

(1) appoint a date (being not later than the close of the first round consultation period or the second round consultation period (as the case may be), time and place for the meeting; and

(2) publish on its website a notice advising of:

(i) the intention to hold such a meeting; and

(ii) the date, time and place for the holding of the meeting.

Part B – Implementation of region determination

2A.10 Purpose and application of Part B

2A.10.1 Purpose of Part B

The purpose of this Part B of Chapter 2A is to enable the efficient and effective implementation of a *region* determination made by the *AEMC* under Part A of Chapter 2A during an implementation period, and to support a smooth market transition from old *region* boundaries to new *region* boundaries.

2A.10.2 Application of Part B

Part B of Chapter 2A applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency prevails during an implementation period for the purpose of the implementation functions described in rule 2A.12.

2A.11 Region Change Implementation Procedure

2A.11.1 Submission of draft Region Change Implementation Procedure

(a) If the *AEMC* in a draft *region* determination, determines to make a *region* change, *AEMO* must prepare a draft Region Change Implementation Procedure in respect of the *region* solution adopted by the *AEMC* in that draft *region* determination.

(b) A draft Region Change Implementation Procedure must set out:

(1) the proposed implementation period as included in the draft *region* determination under clause 2A.7.1(b);

(2) an implementation plan that identifies the key implementation steps to be taken during the implementation period; and

(3) the implementation functions referred to in rule 2A.12 that *AEMO* proposes to exercise to implement the *region* solution proposed by the draft *region* determination.

(c) *AEMO* must submit the draft Region Change Implementation Procedure to the *AEMC* no later than the close of the second round consultation period.

(d) *AEMO* may in consultation with the *AEMC*, make amendments to the draft Region Change Implementation Procedure submitted under paragraph (c) that are necessary to implement a final *region* determination.

(e) The *AEMC* must approve a Region Change Implementation Procedure submitted under paragraph (c) and amended in accordance with paragraph (d) (as the case may be), in respect of a final *region* determination that determines to make a *region* change.

2A.11.2 Approved Region Change Implementation Procedure

(a) *AEMO* must, as soon as practicable after the date of the final *region* determination *publish* the approved Region Change Implementation Procedure.

(b) *AEMO* may, during the implementation period, amend the approved Region Change Implementation Procedure as necessary, and must *publish* any such amended procedure, giving reasons why the amendment is necessary.

2A.12 AEMO region change implementation functions

2A.12.1 General implementation functions

Subject to other functions *AEMO* is required to exercise in accordance with this Chapter 2A, *AEMO* may, during the implementation period, make a decision or take action (including the power to refrain from making a decision or taking action) that is necessary for the implementation of a final *region* determination.

2A.12.2 Implementation functions referable to published implementation procedure

The exercise of the *region* change implementation functions by *AEMO* referred to in clause 2A.12.1 must be referable to and consistent with, the key implementation steps set out in the current *published* Region Change Implementation Procedure.

2A.12.3 Amendment of current or subsequent Regions and Loss Factors Publication

(a) *AEMO* must, as an implementation function, in respect of the current or subsequent *Regions Publication* or Loss Factors Publication, amend those publications as necessary for the effective implementation of a final *region* determination that determines to make a *region* change.

(b) For the avoidance of doubt, in relation to the publications referred to in paragraph (a), nothing prevents *AEMO*:

(1) amending those publications to:

(i) implement future *region* determinations under the *Rules*; or

(ii) deal with future physical changes to the *network*; or

(2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

2A.13 Continuity of regions

On and from a start date:

(1) the unmodified regions continue and are taken to be *regions* for all purposes under the *Rules*; and

(2) the modified regions continue and are taken to be *regions* for all purposes under the *Rules.*

Schedule 2A.1Glossary for Chapter 2A

alternative congestion management options

The alternative means of managing the congestion problem identified in clause 2A.2.2 as referred to in clause 2A.2.5.

alternative proponent

A *Registered Participant* or *AEMO* who requests the *AEMC* in a first round submission, to treat a proposed alternative *region* solution as a formal alternative *region* solution in accordance with clause 2A.4.3(b).

applicant

A *Registered Participant* or *AEMO* who makes a *region* change application to the *AEMC* under rule 2A.2

complete alternative region solution

A proposed alternative *region* solution that satisfies the requirements of clause 2A.4.3(c).

complete application

A *region* change application that meets the requirements of rule 2A.2.

congestion problem

The problem identified in clause 2A.2.2.

first round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.4.1.

first round consultation period

The period of time referred to in clause 2A.4.1(b)(2) that is within 75 *business days* of the date of the first round consultation notice.

first round submission

A written submission made within the first round consultation period in accordance with clause 2A.4.2.

formal alternative region solution

A proposed alternative *region* solution that the *AEMC* is satisfied is a complete alternative *region* solution under clause 2A.4.4(c).

implementation period

The period commencing on the date of a final *region* determination made in accordance with clause 2A.8.1 and ending on the start date.

Loss Factors Publication

The document *published* by *AEMO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) that sets out *marginal loss factors.*

modified regions

The *regions* identified in the current *Regions Publication* modified as a result of a *region* determination taking effect that determines to make a change to existing *regions*.

new regions

The unmodified *regions* and the modified *regions*.

old regions

The *regions* identified in the current *Regions Publication* immediately prior to the start date.

proposed alternative region solution

An alternative *region* solution proposed by an alternative proponent in a first round submission as an alternative to the solution proposed in the *region* change application.

region change application

An application for a *region* change made under rule 2A.2.

region change implementation function

A function referred to in rule 2A.12.

region change implementation procedure

A procedure referred to in rule 2A.11 approved by the *AEMC* in a *region* determination, as amended from time to time in accordance with Part B of Chapter 2A.

region determination

A determination made by the *AEMC* under Chapter 2A and includes a draft *region* determination or a final *region* determination as the context requires.

second round consultation notice

The notice published by the *AEMC* in accordance with clause 2A.7.2.

second round consultation period

The period of time referred to in clause 2A.7.2(b)(2) that is within 60 *business days* of the date of the second round consultation notice.

second round submission

A written submission made within the second round consultation period in accordance with clause 2A.7.3.

start date

The date nominated by the *AEMC* in a final *region* determination on which a change to the existing *regions* comes into effect.

technically competent application

A *region* change application that meets the technical requirements in clause 2A.2.4.

unmodified regions

The *regions* whose boundaries are not affected by a *region* determination.

CHAPTER 3

3. Market Rules

3.1 Introduction to Market Rules

3.1.1 Purpose

This Chapter sets out the procedures which govern the operation of the *market* relating to the wholesale trading of electricity and the provision of *ancillary services* and includes provisions relating to:

(a) *prudential requirements* to be met for participation in the *market*;

(b) the operation of the *spot market*;

(c) bidding and *dispatch*;

(d) *spot price* determination;

(d1) the determination of *ancillary service prices*;

(e) *AEMO* clearing house and trading functions;

(f) *market* information requirements and obligations;

(g) the conditions and procedures for *market suspension*; and

(h) *settlements*.

3.1.2 [Deleted]

3.1.3 [Deleted]

3.1.4 Market design principles

(a) This Chapter is intended to give effect to the following market design principles:

(1) minimisation of *AEMO* decision-making to allow *Market Participants* the greatest amount of commercial freedom to decide how they will operate in the *market*;

(2) maximum level of *market* transparency in the interests of achieving a very high degree of *market* efficiency;

(3) avoidance of any special treatment in respect of different technologies used by *Market Participants*;

(4) consistency between *central dispatch* and pricing;

(5) equal access to the market for existing and prospective *Market Participants*;

(6) *ancillary services* should, to the extent that it is efficient, be acquired through competitive market arrangements and as far as practicable determined on a dynamic basis. Where dynamic determination is not practicable, competitive commercial contracts between *AEMO* and service providers should be used in preference to bilaterally negotiated arrangements;

(7) the power of direction to provide *ancillary services* as a last resort to ensure system security should not be affected by the competitive market arrangements;

(8) where arrangements require participants to pay a proportion of *AEMO* costs for *ancillary services*, charges should where possible be allocated to provide incentives to lower overall costs of the national electricity market. Costs unable to be reasonably allocated this way should be apportioned as broadly as possible whilst minimising distortions to production, consumption and investment decisions; and

(9) where arrangements provide for *AEMO* to *dispatch* or procure an *ancillary service*, *AEMO* should be responsible for settlement of the service.

(a1) *AEMO* must review, prepare and publish a report on:

(1) **[Deleted]**

(2) the operation and effectiveness of the *spot market* for *market ancillary services* within the overall *central dispatch* and any recommendations for their improvement, including:

(i) simplification of the arrangements for the provision of *market ancillary services*; and

(ii) improving the determination of *market ancillary services* requirements;

(3) the potential future implementation of a usage market for *market ancillary services* whilst retaining an enabling market to assist *AEMO* with its obligations with respect to system security; and

(4) the provision of *network control ancillary services* including:

(i) a review of the responsibilities of *AEMO* and *Transmission Network Service Providers* for the provision of *reactive power support*;

(ii) a review of the formulation of those generic *network constraints* within *central dispatch* that are dependant on the provision of *network control ancillary services*; and

(iii) a program to assess the potential implementation of market mechanisms for the recruitment and *dispatch* of *NCAS*.

(a2) In conducting the reviews under clause 3.1.4(a1), *AEMO* must:

(1) seek and take account of the opinion of the *Reliability Panel* on matters to be considered in, and the draft conclusions of, the review set out in clause 3.1.4(a1)(1);

(2) **[Deleted]**

(3) *publish* a program for the conduct of the reviews within three months of the *market ancillary services commencement date*;

(4) take into account when setting the program of the reviews the need to balance the benefit of utilising the results of other reviews or *market* experience and the need to progress *market* development;

(5) use the *Rules consultation procedures* in conducting each review;

(6) *publish* a review outline and indicative timelines at the commencement of each review;

(7) complete each review and deliver to the *AEMC* a report of the findings and recommendations of the review within 12 months of the commencement of the review; and

(8) deliver to the *AEMC* within 3 months of the conclusion of each review any proposed *Rule* changes required to implement the recommendations of the review.

(b) This Chapter is not intended to regulate anti-competitive behaviour by *Market Participants* which, as in all other markets, is subject to the relevant provisions of the Trade Practices Act, 1974 and the Competition Codes of *participating jurisdictions*.

3.1.5 Time for undertaking action

The provisions of clause 1.7.1(l) do not apply to this Chapter and, under the provisions of this Chapter, an event which is required to occur on or by a stipulated *day* must occur on or by that *day* whether or not a *business day.*

3.2 AEMO's Market Responsibilities

3.2.1 Market functions of AEMO

(a) *AEMO* must operate and administer the *market* in accordance with this Chapter.

(b) *AEMO* must establish, maintain and *publish* a register of all current *Market Participants*.

(c) *AEMO* must:

(1) establish procedures for consultation with *Registered Participants* in respect of the manner in which *AEMO* fulfils its functions and obligations under the *Rules*; and

(2) *publish* annually performance indicators to monitor *AEMO's* performance in respect of its *market* management functions.

3.2.2 Spot market

AEMO must do all things necessary to operate and administer a *spot market* for the sale and purchase of electricity and *market ancillary services* in accordance with this Chapter including:

(a) the provision of facilities for the receipt and processing of *dispatch bids, dispatch offers* and *market ancillary service offers* for the *spot market*;

(b) the management of a centralised national *dispatch* process, including the publication of *pre-dispatch schedules* and *spot price forecasts*;

(c) the determination and publication of *spot prices* at each *regional reference node* for each *trading interval*;

(c1) the determination and publication of *ancillary service prices* at each *regional reference node* for each *dispatch interval*;

(d) the compilation and publication of *spot market* trading statistics;

(e) the identification of *regions* and *regional reference nodes* for *spot price* and *ancillary service price* determination;

(f) the determination and publication of *inter-regional loss factors* and *intra-regional loss factors*;

(g) the suspension of the *spot market* under conditions prescribed in rule 3.14; and

(h) the collection and dissemination of information necessary to enable the *market* to operate efficiently.

3.2.3 Power system operations

(a) Subject to Chapter 4, *AEMO* must manage the day to day operation of the *power system*, using its reasonable endeavours to maintain *power system security* in accordance with this Chapter.

(b) *AEMO* must perform *projected assessment of system adequacy processes* ("PASA") in accordance with rule 3.7, *publish* the details of these assessments in accordance with rule 3.13 and implement an escalating series of *market* interventions in accordance with this Chapter to maintain *power system security*.

3.2.4 Ancillary services function

(a) *AEMO* must determine the *market's* requirements for *non-market ancillary services* in accordance with rule 3.11.

(b) *AEMO* must use reasonable endeavours to ensure adequate *non-market ancillary services* are available in accordance with rule 3.11.

3.2.5 [Deleted]

3.2.6 Settlements

AEMO must provide a financial *settlements* service in accordance with rule 3.15, including billing and clearance for all *market* trading.

3.3 Prudential Requirements

3.3.1 Market Participant criteria

Each *Market Participant* must whilst participating in the *market*:

(a) be resident in, or have a permanent establishment in, Australia;

(b) not be under external administration (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;

(c) not be immune from suit in respect of the obligations of the *Market Participant* under the *Rules*; and

(d) be capable of being sued in its own name in a court of Australia.

3.3.2 Credit support

Where at any time a *Market Participant* does not meet the *acceptable credit criteria*, the *Market Participant* must procure that *AEMO* holds the benefit of *credit support* in respect of that *Market Participant*. A *credit support* is an obligation in writing which:

(a) is from an entity (the "*Credit Support Provider*") which meets the *acceptable credit criteria* and which is not itself a *Market Participant*;

(b) is a guarantee or bank letter of credit in a form prescribed by *AEMO;*

(c) is duly executed by the *Credit Support Provider* and delivered unconditionally to *AEMO*;

(d) constitutes valid and binding unsubordinated obligations of the *Credit Support Provider* to pay to *AEMO* amounts in accordance with its terms which relate to obligations of the relevant *Market Participant* under the *Rules*; and

(e) permits drawings or claims by *AEMO* to a stated certain amount.

3.3.3 Acceptable credit criteria

Where the *Rules* require that an entity meet the *acceptable credit criteria,* this means that the entity must:

(a) be either:

(1) any entity under the prudential supervision of the Australian Prudential Regulation Authority; or

(2) a central borrowing authority of an Australian State or Territory which has been established by an Act of Parliament of that State or Territory;

(b) be resident in, or have a permanent establishment in, Australia;

(c) not be an externally administered body corporate (as defined in the Corporations Act) or under a similar form of administration under any laws applicable to it in any jurisdiction;

(d) not be immune from suit;

(e) be capable of being sued in its own name in a court of Australia; and

(f) have an *acceptable credit rating*.

3.3.4 Acceptable credit rating

(a) *AEMO* may from time to time, after complying with the *Rules consultation procedures*, determine what constitutes an *acceptable credit rating* for the purposes of the *Rules*, including (without limitation) determining which organisations publishing ratings will be used for this purpose, which of the type of ratings issued will be used for this purpose, and which level of rating is to be acceptable.

(b) Until varied by determination of *AEMO*, an *acceptable credit rating* is either:

(1) a rating of A-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Standard and Poor's (Australia) Pty. Limited; or

(2) a rating of P-1 or higher for short term unsecured counterparty obligations of the entity, as rated by Moodys Investor Service Pty. Limited.

(c) Any determination of *AEMO* which varies what constitutes an *acceptable credit rating* will take effect from such date (not being earlier than 30 *business days* after the date of notification of the determination to *Market Participants*) as *AEMO* specifies by notice to the *Market Participants*.

3.3.5 Amount of credit support

A *Market Participant* which does not meet the *acceptable credit criteria* must procure that at all times the aggregate undrawn or unclaimed amounts of then current

and valid *credit support* held by *AEMO* in respect of the *Market Participant* is not less than the current *maximum credit limit* for that *Market Participant*.

3.3.6 Changes to credit support

(a) If:

(1) a *credit support* provided to *AEMO* by a *Market Participant* under this rule 3.3 (called the "existing *credit support"),* is due to expire or terminate; and

(2) after that *credit support* expires or terminates the total *credit support* held by *AEMO* in respect of that *Market Participant* will be less than the *Market Participant's maximum credit limit*,

then at least 10 *business days* prior to the time at which the existing *credit support* is due to expire or terminate the *Market Participant* must procure a replacement *credit support* which will become effective upon expiry of the existing *credit support* such that it complies with the requirements of this rule 3.3.

(b) Where a *credit support* otherwise ceases to be current or valid, whether by reason of the *Credit Support Provider* ceasing to meet the *acceptable credit criteria* or any other reason, the *Market Participant* must procure the replacement of that *credit support* so as to comply with its obligation to maintain aggregate undrawn current and valid *credit support* of not less than the current *maximum credit limit* for that *Market Participant*. The *Market Participant* must procure that the replacement *credit support* is issued to *AEMO* within 24 hours after the *Market Participant* first becomes aware that the *credit support* has ceased to be current or valid (whether by reason of the *Market Participant's* own knowledge or a notification by *AEMO*).

3.3.7 Drawings on credit support

(a) If *AEMO* exercises its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), then *AEMO* must notify the *Market Participant.*

(b) If, as a result of *AEMO* exercising its rights under a *credit support* provided by a *Market Participant* under this rule 3.3 in accordance with clause 3.15.21(b)(2), the remaining *credit support* held by *AEMO* in respect of that *Market Participant* is less than the *Market Participant's maximum credit limit* then, within 24 hours of receiving a notice under clause 3.3.7(a), the *Market Participant* must procure for *AEMO* additional *credit support* complying with the requirements of this rule 3.3, such that the aggregate undrawn and valid *credit support* held by *AEMO* in respect of the *Market Participant* is not less than the amount of *credit support* which that *Market Participant* is required to provide under this rule 3.3.

3.3.8 Maximum credit limit and prudential margin

(a) *AEMO* must determine for each *Market Participant* a *maximum credit limit* and *prudential margin*.

(b) The *maximum credit limit* for a *Market Participant* is a dollar amount determined by *AEMO* applying the principles set out in schedule 3.3, being an amount determined by *AEMO* on the basis of a *reasonable worst case* estimate of the aggregate payments for *trading amounts* (after *reallocation*) to be made by the *Market Participant* to *AEMO* over a period of up to the *credit period* applicable to that *Market Participant*.

(c) The *prudential margin* for a *Market Participant* is a dollar amount to be determined by *AEMO* applying the principles set out in schedule 3.3, being an amount determined by *AEMO* on the basis of a *reasonable worst case* estimate of the aggregate of the expected *trading amount* and the *reallocation amount* owing by the *Market Participant* to *AEMO* in respect of the *reaction period*.

(d) *AEMO* must *publish* details of the methodology used in determining *maximum credit limits* and *prudential margins*.

(e) *AEMO* shall review the *maximum credit limit* and *prudential margin* of each *Market Participant* not less than once each year.

(f) *AEMO* may change either or both of the *maximum credit limit* or *prudential margin* for a *Market Participant* at any time (whether by reason of an annual review or otherwise), provided that any change to the *maximum credit limit* or *prudential margin* will apply with effect from such time (not being earlier than the time of notification of the changed *maximum credit limit* or *prudential margin*, as the case may be, to the *Market Participant*) as *AEMO* specifies.

(g) *AEMO* must notify the *Market Participant* of any determination or change under this clause 3.3.8 of that *Market Participant's maximum credit limit* or *prudential margin* (as the case may be) and, on request from that *Market Participant,* provide details of the basis for that determination or change, including the trading, price, volatility and *prospective reallocation* assumptions and the average *spot prices* and *ancillary service prices* and average *trading amounts.*

3.3.8A Security Deposits

At any time, a *Market Participant* may provide a security deposit to *AEMO* to secure payment of any amount which may become payable in respect of a *billing period*.

3.3.9 Outstandings

At any time the *outstandings* of a *Market Participant* is the dollar amount determined by the formula:

$$OS = -(A + B + SDA)$$

where:

OS is the amount of the *outstandings* of the *Market Participant*;

A is the aggregate of the net *settlement amounts* payable in respect of *billing periods* prior to the current *billing period* which remain unpaid by, or to, the *Market Participant* whether or not the *payment date* has yet been reached;

B is the net *settlement amount* payable by, or to, the *Market Participant* in respect of *transactions* for *trading intervals* that have already occurred in the current *billing period*; and

SDA is the balance (if any) of the *Market Participant* in the security deposit fund, in which case a credit balance will be a positive amount and a debit balance will be a negative amount.

The amounts to be used in this calculation will be the actual *settlement amounts* for *billing periods* where *final statements* have been issued by *AEMO* or *AEMO's* reasonable estimate of the *settlement amounts* for *billing periods* (where *final statements* have not been issued by *AEMO*).

Note: Where the value of *outstandings* of a *Market Participant* is a negative amount the absolute value of the *outstandings* amount will, for the purposes of rule 3.3, be treated as if it were an amount payable by *AEMO* to the *Market Participant*.

3.3.10 Trading limit

The trading limit for a *Market Participant* is the dollar amount determined by *AEMO* on the basis of a *reasonable worst case* estimate by *AEMO* applying the principles in schedule 3.3 and determined using the following formula:

TL = CS – PM

where:

TL is the *trading limit*;

CS is the *credit support* provided by the *Market Participant*; and

PM is the *prudential margin* determined in accordance with clause 3.3.8(c).

Note: If the *prudential margin* exceeds the *credit support* the *trading limit* will have a negative value.

3.3.11 Call notices

(a) If at any time the *outstandings* of a *Market Participant* is greater than the *trading limit* for that *Market Participant*, *AEMO* may do either or both of the following:

(1) give the *Market Participant* an "*interim statement*" covering any *transactions* for *trading intervals* not already the subject of issued *preliminary* or *final statements* or another *interim statement*, notwithstanding that the usual time for the issue of a *preliminary* or *final statement* for those *trading intervals* has not been reached; and

(2) give the *Market Participant* a notice (a "*call notice*") that specifies an *invoiced amount*, the current *maximum credit limit* for the *Market Participant*, the current *trading limit* for the *Market Participant*, and the *call amount*, where:

Call Amount = the higher of:

(OS – TypA); and

(OS – TL)

except where the formula produces a negative result, in which case the *call amount* is zero,

where:

OS is the *outstandings* for the *Market Partic*ipant as at the date of the issue of the *call notice*; and

TypA is the *typical accrual* for the *Market Participant* as at the date of the issue of the *call notice*; and

TL is the *trading limit* for the *Market Participant* as at the date of the issue of the *call notice*.

Note: If the value of *outstandings* of a *Market Participant* has a negative value and the *trading limit* also has a negative value, the *outstandings* will be greater than the *trading limit* if the absolute value of the *trading limit* is greater than the absolute value of the *outstandings*, in which case *AEMO* may exercise its powers under either or both of clauses 3.3.11(a)(1) or 3.3.11(a)(2).

(b) *AEMO* may, in its absolute discretion, cancel a *call notice* or *interim statement* issued under this clause at any time. The cancellation of a *call notice* or *interim statement* does not affect *AEMO's* rights to issue a further *call notice* or *interim statement* on the same grounds that gave rise to *AEMO* issuing the cancelled *call notice* or *interim statement*.

3.3.12 Typical accrual

(a) The *typical accrual* for a *Market Participant* at any time is the amount which *AEMO* determines would have been the *outstandings* of the *Market Participant* at that time had the *spot prices* and *ancillary service prices* and the *trading amounts* of the *Market Participant* been at the level of the average *spot price* and *ancillary service prices* and average *trading amounts* of the *Market Participant* used by *AEMO* for the purposes of the most recent determination of the *maximum credit limit* of the *Market Participant*.

Note: The value of the *typical accrual* of a *Market Participant* will be a negative amount if the average *settlement amount* of the *Market Participant* is a positive amount.

(b) *AEMO* must, on request from a *Market Participant*, provide that *Market Participant* with details of any *typical accrual* for that *Market Participant*.

3.3.13 Response to Call Notices

(a) Subject to clause 3.3.13(b), where *AEMO* has given a *call notice* to a *Market Participant*, the *Market Participant* must before 11.00 am (*Sydney time*) on the next *business day* following the issue of the *call notice* either:

(1) agree with *AEMO* to an increase in the *Market Participant's maximum credit limit* by an amount not less than the *call amount*, and provide to *AEMO* additional *credit support* where, by virtue of the increase in the *maximum credit limit*, the *Market Participant* no longer complies with its obligations under clause 3.3.5;

(2) (where clause 3.3.13(a)(1) is not satisfied) pay to *AEMO* in cleared funds a security deposit of an amount not less than the *call amount*;

(3) lodge a *reallocation request* of an amount which is not less than the *call amount* and which is accepted by *AEMO*; or

(4) provide to *AEMO* any combination of clauses 3.3.13(a)(1), (2) and (3) such that the aggregate of the amount which can be drawn under the additional *credit support* provided and the amount of the security deposit paid and the amount of the *reallocation request* accepted by *AEMO* is not less than the *call amount.*

(b) If *AEMO* gives a *call notice* to a *Market Participant* after noon (*Sydney time*), then *AEMO* is deemed to have given that *call notice* on the next *business day* for the purposes of this clause.

3.3.13A Application of monies in the security deposit fund

(a) Subject to clauses 3.3.13A(b) and (e), *AEMO* may apply money from the security deposit fund recorded as a credit balance in the name of a *Market Participant* in payment of monies owing by that *Market Participant* to *AEMO*:

(1) in respect of any *final statement* previously given to that *Market Participant* which has not been fully paid by the appointed time on the due date and remains unpaid; or

(2) at the time of issuing any *final statement*,

in which case *AEMO* may set off all, or part of, any amount by which a *Market Participant* is in credit in the security deposit fund at that time against any amounts owing to *AEMO* under the *final statement*.

(b) Subject to clause 3.3.13A(c):

(1) a *Market Participant* may, by giving notice at least one *business day* prior to the due time for the issue of a *final statement*, seek agreement with *AEMO* on the arrangements to apply to the application of security deposits paid by that *Market Participant* under clause 3.3.8A against amounts owing to *AEMO* under a particular *final statement* or *final statements*; and

(2) *AEMO* must apply the security deposits in accordance with an agreement reached under clause 3.3.13A(b)(1).

If agreement is not reached between *AEMO* and the *Market Participant* under this clause, then *AEMO* has a discretion to apply the security deposit funds of that *Market Participant* in payment of moneys that the *Market Participant* owes *AEMO* as set out in clauses 3.3.13A(a)(1) and (2).

(c) Despite any agreement under clause 3.3.13A(b), if a *default event* occurs in relation to a *Market Participant*, then *AEMO* has a discretion as to which amounts owing to *AEMO* under *final statements* it applies or partially applies security deposits paid by that *Market Participant* under clause 3.3.8A.

(d) In the case of security deposits paid by a *Market Participant* in the security deposit fund under clause 3.3.13, *AEMO* has a discretion as to which *final statements* it applies or partially applies those monies against.

(e) However, in exercising its discretion in clauses 3.3.13A(b), (c) or (d), if a *Market Participant* pays *AEMO* a security deposit, then *AEMO* must apply any remaining portion of the security deposit (taking into account deductions for any liabilities or expenses of the security deposit fund) against the longest outstanding amounts owing to *AEMO* under *final statements* issued not later than the *final statement* for the *billing period* in which the security deposit was paid to *AEMO*. If, for any reason, *AEMO* has not fully applied such security deposit within this time, then *AEMO* must apply the remainder to amounts owing to *AEMO* under the next *final statement* or *statements* until it has been fully applied.

(f) If:

(1) a *Market Participant* has a credit balance in the security deposit fund and ceases, or intends to cease, being a *Market Participant*; and

(2) that *Market Participant* has paid all money owing to *AEMO* and *AEMO* reasonably considers that the *Market Participant* will not owe any money to *AEMO* in the future arising from that person's activities as a *Market Participant*,

then *AEMO* must return any credit balance for that *Market Participant* in the security deposit fund to that *Market Participant* (subject to deduction for any liabilities and expenses of the security deposit fund).

(g) If, for any reason, there is a debit balance in the security deposit fund for a *Market Participant*, then the *Market Participant* must pay that amount to *AEMO*. For this purpose, *AEMO* may:

(1) include that amount in the next *final statement*; or

(2) issue an account to that *Market Participant* for payment of that debit balance and the *Market Participant* must pay that amount within 2 *business days*.

3.3.14 Potential value of a transaction

At any time, the *potential value* of a *transaction*, or of any bid or offer by a *Market Participant* to effect a *transaction*, under which the *trading amount* payable to *AEMO* is determined by reference to one or more specified *regional reference prices* or *ancillary service prices*, is the dollar amount determined by this procedure:

(a) the *transaction* is first tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary service price* applicable to the *transaction* was equal to the *scheduled high price*;

(b) the *transaction* is then tested to determine the *trading amount* which would result for the *Market Participant* if the *regional reference price* or *ancillary service price* applicable to the *transaction* was equal to the *scheduled low price*;

(c) if the *trading amount* resulting for both tests is a positive amount or zero, then the *potential value* of the *transaction* is zero;

(d) if the *trading amount* resulting for either test is a negative amount, then the *potential value* of the *transaction* is the absolute value of the negative amount (or, where both tests produce a negative amount, the *potential value* of the *transaction* is the absolute value of the most negative amount).

3.3.15 Trading margin

At any time, the *trading margin* for a *Market Participant* is a dollar amount equal to the amount by which its *trading limit* exceeds its current *outstandings* due to *AEMO* and if the *outstandings* are equal to or exceed the *trading limit*, the *trading margin* is zero.

3.3.16 Limitation on entry of transactions

(a) A *Market Participant* must not submit any bid or offer to effect any *transaction* with *AEMO* where the *potential value* of that *transaction*, plus the *potential value* of all other *uncompleted transactions*, exceeds the *trading margin* for the *Market Participant*.

(b) A *transaction* is an *uncompleted transaction* if some or all of the *trading intervals* to which that *transaction* relates have not yet occurred.

3.3.17 Scheduled prices

(a) The *scheduled high price* and the *scheduled low price* are amounts determined by *AEMO* in its absolute discretion from time to time as a basis upon which to determine the *potential value* of a *transaction* in accordance with clause 3.3.14.

(b) *AEMO* may determine different *scheduled high prices* and *scheduled low prices* for each *region*.

(c) The *scheduled high price* for *energy* and *market ancillary services* cannot be greater than the *market price cap* and the *scheduled low price* for:

(i) *energy*, cannot be less than the *market floor price*; and

(ii) *market ancillary services*, cannot be less than zero.

(d) *AEMO* must notify all *Market Participants* without delay of any determination of *scheduled high prices* and *scheduled low prices*.

(e) For *Market Participants* who do not trade in the *spot market*, the *scheduled high price* shall be the *market price cap* and the *scheduled low price* shall be zero.

3.3.18 Additional credit support

(a) Where at any time the aggregate *potential value* of a *Market Participant's uncompleted transactions* exceeds the *trading margin* for the *Market Participant* (including without limitation where this is a result of a redetermination of *scheduled high prices* or *scheduled low prices*) the *Market Participant* must provide to *AEMO* additional *credit support* satisfying the criteria in clause 3.3.2 for an amount not less than the amount by which the *trading margin* is exceeded. The *Market Participant* must procure that the additional *credit support* is provided to *AEMO* within 24 hours after *AEMO* has notified the *Market Participant* that additional *credit support* is required.

(b) *Credit support* required pursuant to this clause 3.3.18 is in addition to and not inclusive of the *credit support* which a *Market Participant* is required to procure pursuant to other provisions of the *Rules*.

3.3.19 Consideration of other Market Participant transactions

(a) For the purposes of determining the *prudential requirements* to be satisfied by *Market Participants* in accordance with this rule 3.3, *AEMO* must consult with *Market Participants* and any other person *AEMO* considers appropriate.

(b) *AEMO* is not required to meet its obligations under clause 3.3.19(a) in any way which increases *AEMO*'s risks in the collection of moneys owed to it in accordance with any of the provisions of the *Rules*.

3.4 Spot Market

3.4.1 Establishment of spot market

(a) *AEMO* must establish and operate a *spot market* as a mechanism for:

(1) balancing electricity *supply* and demand;

(2) acquiring *market ancillary services*; and

(3) setting a *spot price* for electricity at each *regional reference node* and *market connection point* for each *trading interval* and *ancillary service prices* at each *regional reference node* for each *dispatch interval*.

(b) *AEMO* must determine and *publish* in accordance with rule 3.9:

(1) a *spot price* for *energy* to apply at each *regional reference node* in each *trading interval*; and

(2) a*ncillary service prices* to apply at each *regional reference node* for each *dispatch interval*.

3.4.2 Trading day and trading interval

(a) A *trading interval* is a 30 minute period ending on the hour or on the half hour.

(b) A *trading interval* is identified by the *time* at which it ends.

(c) The *trading day* in the *spot market* will be the 24 hour period commencing at 4.00 am Eastern Standard Time.

3.4.3 Spot market operations timetable

(a) *AEMO* must operate the *spot market* according to the *timetable* which must be approved by the *AEMC* and *published* by *AEMO* following compliance with the *Rules consultation procedures*.

(b) If *AEMO* wishes to change the *timetable* at any time, it may do so following compliance with the *Rules consultation procedures*.

3.5 Regions

3.5.1 [Deleted]

3.5.2 [Deleted]

3.5.3 [Deleted]

3.5.4 [Deleted]

3.5.5 [Deleted]

3.5.6 Abolition of Snowy region

(a) In this clause 3.5.6:

current *Regions Publication* means the document published by *NEMMCO* entitled "List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year".

New South Wales *region* comprises the *region* as identified in the current *Regions Publication*.

Snowy *region* comprises the *region* as identified in the current *Regions Publication*.

Victoria *region* comprises the *region* as identified in the current *Regions Publication*.

(b) Despite any other provision of the *Rules*, at 00:00 hours *EST* on 1 July 2008:

(1) the Snowy *region* is abolished;

(2) the *regional reference node* known as the Murray 330kV node is abolished;

(3) the New South Wales *region* and the Victoria *region* are modified by the allocation of the *loads* and *generators* to each *region* as set out in clause 11.13.8; and

(4) the location of the *region* boundary between the New South Wales *region* and the Victoria *region* is as set out in clause 11.13.9.

(c) For the avoidance of doubt:

(1) the *regional reference node* (known as the Sydney West 330kV node) for the New South Wales *region;* and

(2) the *regional reference* node *(*known as the Thomastown 66kV node) for the Victoria *region,*

are not affected by the abolition of the *regional reference node* known as the Murray 330kV node for the Snowy *region*.

3.6 Network Losses and Constraints

3.6.1 Inter-regional losses

(a) *Inter-regional losses* are *electrical energy losses* due to a notional transfer of electricity through *regulated interconnectors* from the *regional reference node* in one *region* to the *regional reference node* in an adjacent *region*.

(b) *Inter-regional loss factors*:

(1) describe the *marginal electrical energy losses* for electricity transmitted through *regulated interconnectors* from a *regional reference node* in one *region* to the *regional reference node* in an adjacent *region* for a particular time period and a defined range of operating conditions;

(2) to apply between each pair of adjacent *regional reference nodes* are to be determined as part of the *central dispatch* process using *inter-regional loss factor* equations derived in accordance with the methodology determined by *AEMO* pursuant to clause 3.6.1(c); and

(3) are to be used in the *central dispatch* process as a notional adjustment to relate the prices of electricity at *regional reference nodes* in adjacent *regions* so as to reflect the cost of *inter-regional losses*.

(c) *AEMO* must determine, *publish* and maintain, in accordance with the *Rules consultation procedures*, a methodology for the determination of *inter-regional loss factor* equations for a *financial year*, describing *inter-regional loss factors* between each pair of adjacent *regional reference nodes* in terms of significant variables.

(d) In preparing the methodology for the determination of *inter-regional loss factor* equations referred to in clause 3.6.1(c), *AEMO* must implement the following principles:

(1) *Inter-regional loss factor* equations are to apply for a *financial year*.

(2) *Inter-regional loss factor* equations must be suitable for use in *central dispatch*.

(3) *Inter-regional loss factors* are determined as part of the *central dispatch* process using *inter-regional loss factor* equations. The *inter-regional loss factors* must:

(i) as closely as is reasonably practicable, describe the *marginal electrical energy losses* for electricity transmitted through the relevant *regulated interconnector* between the 2 relevant *regional reference nodes* in adjacent *regions* for each *trading interval* of the *financial year* in respect of which the relevant *inter-regional loss factor* equations apply; and

(ii) aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* as compared to the *dispatch* of *generation* and *scheduled load* which would result from a fully optimised dispatch process taking into account the effect of losses.

(4) *Inter-regional loss factor* equations are determined using forecast *load* and *generation* data and, if required, modelled *load* and *generation* data for the *financial year* in which the *inter-regional loss factor* equations are to apply. The forecast *load* and *generation* data and modelled *load* and *generation* data, if any, used must be that *load* and *generation* data prepared by *AEMO* pursuant to clause 3.6.2A.

(5) *Inter-regional loss factor* equations are determined by applying regression analysis to the *load* and *generation* data referred to in clause 3.6.1(d)(4) to determine:

(i) the variables which have a significant effect on the *marginal electrical energy losses* for electricity transmitted through each *regulated interconnector* for both directions of flow on those *regulated interconnectors*; and

(ii) the parameters that represent the relationship between each of those variables and the *marginal electrical energy losses*.

(e) *AEMO* must determine the *inter-regional loss factor* equations used to calculate *inter-regional loss factors* in each *financial year* in accordance with the methodology prepared and *published* by *AEMO* under clause 3.6.1(c).

(f) *AEMO* must *publish* the *inter-regional loss factor* equations determined under clause 3.6.1(e) by 1 April prior to the *financial year* in which they are to apply.

3.6.2 Intra-regional losses

(a) *Intra-regional losses* are *electrical energy losses* that occur due to the transfer of electricity between a *regional reference node* and *transmission network connection points* in the same *region*.

(b) *Intra-regional loss factors*:

(1) notionally describe the *marginal electrical energy losses* for electricity transmitted between a *regional reference node* and a *transmission network connection point* in the same *region* for a defined time period and associated set of operating conditions;

(2) will be a single static *intra-regional loss factor* that applies for a *financial year* derived in accordance with the methodology determined by *AEMO* pursuant to clause 3.6.2(d) for each *transmission network connection point*; and

(3) may, with the agreement of the *AER*, be averaged over an adjacent group of *transmission network connection points* within a single *region*. If averaging is used, the relevant *transmission network connection points* will be collectively defined as a *virtual transmission node* with a *loss factor* calculated as the volume weighted average of the *transmission loss factors* of the constituent *transmission network connection points*.

(c) An *intra-regiona*l *loss factor* is to be used as a price multiplier that can be applied to the *regional reference price* to determine the *local spot price* at each *transmission network connection point* and *virtual transmission node*.

(d) *AEMO* must determine, *publish* and maintain, in accordance with *Rules consultation procedures*, a methodology for the determination of *intra-regional loss factors* to apply for a *financial year* for each *transmission network connection point*.

(e) In preparing the methodology referred to in clause 3.6.2(d), *AEMO* must implement the following principles:

(1) *Intra-regional loss factors* are to apply for a *financial year*.

(2) An *intra-regional loss factor* must, as closely as is reasonably practicable, describe the average of the *marginal electrical energy losses* for electricity transmitted between a *transmission network connection point* and the *regional reference node* in the same *region* for each *trading interval* of the *financial year* in which the *intra-regional loss factor* applies.

(2A) *Intra-regional loss factors* must aim to minimise the impact on the *central dispatch* process of *generation* and *scheduled load* compared to that which would result from a fully optimised dispatch process taking into account the effect of losses.

(3) Forecast *load* and *generation* data for the *financial year* for which the *intra-regional loss factor* is to apply must be used. The forecast *load* and *generation* data used must be that *load* and *generation* data prepared by *AEMO* pursuant to clause 3.6.2A.

(4) The *load* and *generation* data referred to in clause 3.6.2(e)(3) must be used to determine *marginal loss factors* for each *transmission network connection point* for each *trading interval* in the *financial year* to which the *load* and *generation* data relates.

(5) The *intra-regional loss factor* for each *transmission network connection point* is determined using a volume weighted average of the *marginal loss factors* for the *transmission network connection point*.

(6) In determining the *intra-regional loss factor* for a *transmission network connection point*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.

(f) *AEMO* must calculate *intra-regional loss factors* for each *transmission network connection point* for each *financial year* in accordance with the methodology prepared and published by *AEMO* under clause 3.6.2(d).

(f1) By 1 April in each year, *AEMO* must *publish* the *intra-regional loss factors* revised under clause 3.6.2(f) and to apply for the next *financial year*.

(g) *AEMO* must, in accordance with the *Rules consultation procedures*, determine, *publish* and maintain the methodology which is to apply to the calculation of average *transmission loss factors*, determined in accordance with clause 3.6.2(b)(3), for each *virtual transmission node* proposed by a *Distribution Network Service Provider.*

(h) As soon as practicable after the *publication* of the methodology referred to in clause 3.6.2(g), and thereafter by 1 April in each year, *AEMO* must calculate and *publish* the *transmission loss factors* for each *virtual transmission node*, determined in accordance with clause 3.6.2(b)(3), that are to apply for the next *financial year*.

(i) Notwithstanding clauses 3.6.2(a) to (f1), *AEMO* must:

(1) determine an *intra-regional loss factor* in the *financial year* in which the *intra-regional loss factor* is to apply for a *transmission network connection point* which is established in that *financial year* in accordance with the procedure for establishing *connection* set out in rule 5.3, provided that *AEMO* did not determine an *intra-regional loss factor* for the *transmission network connection point* pursuant to clause 3.6.2(f1) in the *financial year* preceding that in which the *connection point* is established; or

(2) revise an *intra-regional loss factor* in the *financial year* in which the *intra-regional loss factor* is to apply for a *transmission network connection point* which is modified in that *financial year* in accordance

with the procedure for modifying *connection* set out in rule 5.3, provided that, in *AEMO*'s reasonable opinion, the modification to that *connection point* results in a material change in the capacity of the *connection point*.

(j) *AEMO* must, where required to determine the *intra-regional loss factor* for an established or modified *transmission network connection point* under clause 3.6.2(i), do so as far as practicable in accordance with the methodology *published* by *AEMO* pursuant to clause 3.6.2(d).

(k) For the purposes of clause 3.6.2(j), the forecast *load* and *generation* data used to calculate the *intra-regional loss factor* for the *transmission network connection point* must be determined using the forecast *load* and *generation* data determined by *AEMO* under clause 3.6.2A for other *transmission network connection points* in the same *region* for that *financial year* adjusted to take into account the effect of the established or modified *connection point*. Notwithstanding this clause 3.6.2(k), *Registered Participants* must comply with their obligations with respect to the provision of information to *AEMO*, for the purpose of determining new or revised *intra-regional loss factors* for *connection points* that are established or modified during the *financial year* in which the *intra-regional loss factors* are to apply, specified by the methodology developed and *published* by *AEMO* under clause 3.6.2A.

(l) In the case of a *connection point* that is established in the *financial year* in which the *intra-regional loss factor* is to apply:

(1) the *intra-regional loss factor* determined by *AEMO* in accordance with clause 3.6.2(i) will apply from the time the *intra-regional loss factor* is determined and *published* by *AEMO*; and

(2) *AEMO* must use reasonable endeavours to determine and *publish* the *intra-regional loss factor* at least 45 *business days* prior to the commencement of operation of the established *connection point*, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *AEMO* specified by the methodology *published* by *AEMO* under clause 3.6.2A.

(m) In the case of a *connection point* that is modified in the *financial year* in which the *intra-regional loss factor* is to apply:

(1) the *intra-regional loss factor* determined by *AEMO* in accordance with clause 3.6.2(i) will apply from the date when the modification to the *connection point* takes effect; and

(2) *AEMO* must use reasonable endeavours to *publish* the *intra-regional loss factor* at least 45 *business days* prior to the date when the modification to the *connection point* takes effect, where the relevant *Registered Participants* comply with any applicable requirements and deadlines for the provision of information to *AEMO* specified by the methodology *published* by *AEMO* under clause 3.6.2A.

(n) For the avoidance of doubt, where *AEMO* determines an *intra-regional loss factor* for a *transmission network connection point* under clause 3.6.2(i), which is to apply in the *financial year* in which the *transmission network connection*

point is established or modified, the *intra-regional loss factors* for all other *transmission network connection points* for that *financial year*, determined in accordance with clauses 3.6.2(a) to (g), must remain unchanged.

3.6.2A Load and generation data used to determine inter-regional loss factor equations and intra-regional loss factors

(a) *AEMO* must prepare *load* and *generation* data for each *financial year* to be used in both the determination of *inter-regional loss factor* equations under clause 3.6.1 and *intra-regional loss factors* under clause 3.6.2 in accordance with the methodology determined, *published* and maintained by *AEMO* for this purpose, under clause 3.6.2A(b).

(b) *AEMO* must determine, *publish* and maintain, in accordance with the *Rules consultation procedures*, a methodology for:

(1) forecasting the *load* and *generation* data to be used in both the determination of *inter-regional loss factor* equations and *intra-regional loss factors*, including new or revised *intra-regional loss factors* for *connection points* that are established or modified, respectively, during the *financial year* in which the *intra-regional loss factors* are to apply;

(2) modelling additional *load* and *generation* data, where required, to be used in determining *inter-regional loss factor* equations; and

(3) the collection of relevant data from *Registered Participants*, including without limitation deadlines for the provision of that data by *Registered Participants.*

(c) The methodology developed and *published* by *AEMO* under clause 3.6.2A(b) must specify information reasonably required by *AEMO* to fulfil its obligations under clause 3.6.2A, including without limitation historic *load* and *generation* data, forecast *energy* and *maximum demand* data for a *connection point* and forecast data for any new *loads*. In particular, the methodology must specify information to be provided by *Registered Participants* that is in addition to the information provided by those *Registered Participants* under other provisions of the *Rules*.

(d) In preparing the methodology for forecasting and modelling *load* and *generation* data under clause 3.6.2A(b), *AEMO* must implement the following principles:

(1) The forecast *load* and *generation* data must be representative of expected *load* and *generation* in the *financial year* in which the *inter-regional loss factor* equations or *intra-regional loss factors* are to apply having regard to:

(i) actual *load* and *generation* data available for a 12 month period defined by the methodology with the objective to use the most recent *load* and *generation* data practicable;

(ii) projected *load* growth between each calendar month to which the actual *load* and *generation* data referred to in clause 3.6.2A(d)(1)(i)

relates and the same calendar month in the *financial year* for which the forecast *load* and *generation* data is determined; and

(iii) the projected *network* configuration and projected *network* performance for the *financial year* in which the *inter-regional loss factor* equation or *intra-regional loss factor*, as the case may be, is to apply.

(2) Additional modelled *load* and *generation* data sets must only be used:

(i) in the determination of *inter-regional loss factor* equations under clause 3.6.1; and

(ii) where the range of forecast *load* and *generation* data is not sufficient to derive *inter-regional loss factor* equations to apply over the full range of transfer capability of the *regulated interconnector*.

(e) *Registered Participants* must comply with the obligations to provide information set out in the methodology developed and *published* by *AEMO* under this clause 3.6.2A, including the deadlines for the provision of that information and any other obligations with respect to the provision of that information set out in the methodology.

3.6.3 Distribution losses

(a) *Distribution losses* are *electrical energy losses* incurred in the conveyance of electricity over a *distribution network*.

(b) *Distribution loss factors*:

(1) notionally describe the *average electrical energy losses* for electricity transmitted on a *distribution network* between a *distribution network connection point* and a *transmission network connection point* or *virtual transmission node* for the financial year in which they apply;

(2) will be either:

(i) a site specific *distribution loss factor* derived in accordance with the methodology determined by the *AER* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), for each *distribution network connection point* of the following types:

(A) a *connection point* for an *embedded generating unit* with actual *generation* of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not available for a consecutive 12 month period as a *distribution network connection point* is newly established or has been modified, a *Network Service Provider* may determine whether an *embedded generating unit* has *generation* of more than 10MW, based on its best projection of *generation* in the *financial year* in which the *distribution*

loss factor is to apply, taking into account the terms of the relevant *connection agreement*;

(B) a *connection point* for an end-user with actual or forecast *load* of more than 40GWh or an electrical demand of more than 10MW, based on the most recent data available for a consecutive 12 month period at the time of determining the *distribution loss factor*. Where relevant data is not available for a consecutive 12 month period as a *distribution network connection point* is newly established or has been modified, a *Network Service Provider* may determine whether an end-user has *load* of more than 40GWh or forecast *peak load* of more than 10MW, based on its best projection of *load* in the *financial year* in which the *distribution loss factor* is to apply, taking into account the terms of the relevant *connection agreement*;

(C) a *connection point* for a *market network service provider*; and

(D) a *connection point* between two or more *distribution networks*; or

(ii) derived, in accordance with the methodology determined by the *AER* or the *Distribution Network Service Provider* pursuant to clause 3.6.3(h), using the volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant *voltage* class (determined in accordance with clause 3.6.3(d)(2)) assigned to that *transmission network connection point* or *virtual transmission node*, for all *connection points* on a *distribution network* not of a type described in clause 3.6.3(b)(2)(i);

(3) are to be used in the settlement process as a notional adjustment to the electrical *energy*, expressed in MWh, flowing at a *distribution network connection point* in a *trading interval* to determine the *adjusted gross energy* amount for that *connection point* in that *trading interval*, in accordance with clause 3.15.4.

(b1) Where a *Generator* meets the reasonable cost of the *Distribution Network Service Provider* in performing the necessary calculation in respect of a *generating unit* of up to 10MW or 40GWh per annum capacity, the *Distribution Network Service Provider* must calculate a site specific *distribution loss factor* that, notwithstanding any other provision of the *Rules* to the contrary, for the purposes of the *Rules* is to apply in respect of that *generating unit* on the same basis as applies for a *generating unit* of more than 10MW or 40GWh per annum capacity as though the *generating unit* were a unit of more than 10MW or 40GWh per annum capacity.

(c) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, of a type described in clause 3.6.3(b)(2)(i), to a single *transmission network connection point* taking into account normal *network* configurations and predominant *load* flows.

(d) Each *Distribution Network Service Provider* must assign each *connection point* on its *distribution network*, not of a type described in clause 3.6.3(b)(2)(i):

(1) where practicable, to a single *transmission network connection point* or otherwise, to a *virtual transmission node*, taking into account normal network configurations and predominant *load* flows; and

(2) to a class of *distribution network connection points* based on the location of, *voltage* of and pattern of electrical *energy* flows at the *distribution network connection point*.

(e) So far as practicable, the assignment of *connection points* on the *distribution network* to:

(1) *transmission network connection points* under clause 3.6.3(c); or

(2) *transmission network connection points* or *virtual transmission nodes* and a class of *distribution network connection points* under clause 3.6.3(d),

must be consistent with the geographic boundaries of the *pricing zones* for use in *distribution service* pricing, and the *voltage* levels incorporated within those *pricing zones*.

(f) The assignment of *connection points* on a *distribution network*:

(1) to a single *transmission network connection point* under clause 3.6.3(c); or

(2) to a *transmission network connection point* or *virtual transmission node* and a class of *distribution network connection points* under clause 3.6.3(d),

is subject to the approval of the *AER* and the *Distribution Network Service Provider* must inform *AEMO* of such approved assignments.

(g) *Distribution loss factors* must be determined by a *Distribution Network Service Provider* for all *connection points* on its *distribution network* either individually, for all connection points assigned to a single *transmission network connection point* under clause 3.6.3(c), or collectively, for all *connection points* assigned to a *transmission network connection point* or a *virtual transmission node* and a particular *distribution network connection point* class under clause 3.6.3(d), in accordance with:

(1) the methodology developed, *published* and maintained by the *AER* for the determination of *distribution loss factors*; or

(2) where the *AER* has not *published* a methodology under clause 3.6.3(g)(1), the methodology developed, *published* and maintained by the *Distribution Network Service Provider* for the determination of *distribution loss factors*.

(h) The methodology for the determination of *distribution loss factors* referred to in clause 3.6.3(g) must be developed having regard to the following principles:

(1) The aggregate of the *adjusted gross energy* amounts for a *distribution network*, determined in accordance with clause 3.15.4 using the *distribution loss factors* for the *financial year* in which the *distribution loss factors* are to apply should equal, as closely as is reasonably practicable, the sum of:

A. the amount of electrical *energy*, expressed in MWh, flowing at all *connection points* in the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply; and

B. the total *electrical energy losses* incurred on the *distribution network* in the *financial year* in which the *distribution loss factors* are to apply.

(2) The methodology used to determine *distribution loss factors* for a *financial year* should incorporate provisions requiring a *Distribution Network Service Provider* to undertake a reconciliation between the aggregate of the *adjusted gross energy* amounts for its *distribution network* for the previous *financial year* determined in accordance with clause 3.15.4 using the *distribution loss factors* that applied for *connection points* in that *distribution network* in the previous *financial year* and the sum of:

(i) the amount of electrical *energy*, expressed in MWh flowing, at all *connection points* in its *distribution network* in the previous *financial year*; and

(ii) the total *electrical energy losses* incurred on its *distribution network* in the previous *financial year*.

(3) The *distribution loss factor* for a *distribution network connection point*, other than those described in clause 3.6.3(b)(2)(i), is determined using a volume weighted average of the *average electrical energy loss* between the *transmission network connection point* or *virtual transmission node* to which it is assigned and each *distribution network connection point* in the relevant class of *distribution network connection points* assigned to that *transmission network connection point* or *virtual transmission node* for the *financial year* in which the *distribution loss factor* is to apply.

(4) The *distribution loss factor* for a *distribution network connection point* described in clause 3.6.3(b)(2)(i) is determined using the *average electrical energy loss* between the *distribution network connection point* and the *transmission network connection point* to which it is assigned in the *financial year* in which the *distribution loss factor* is to apply.

(5) In determining the *average electrical energy losses* referred to in clauses 3.6.3(h)(3) and (4), the *Distribution Network Service Provider* must use the most recent actual *load* and *generation* data available for a consecutive 12 month period but may adjust this *load* and *generation*

data to take into account projected *load* and / or *generation* growth in the *financial year* in which the *distribution loss factors* are to apply.

(6) In determining *distribution loss factors*, flows in *network elements* that solely or principally provide *market network services* will be treated as invariant, as the methodology is not seeking to calculate the *marginal losses* within such *network elements*.

(i) Each year the *Distribution Network Service Provider* must determine the *distribution loss factors* to apply in the next *financial year* in accordance with clause 3.6.3(g) and provide these to *AEMO* for *publication* by 1 April. Before providing the *distribution loss factors* to *AEMO* for *publication*, the *Distribution Network Service Provider* must obtain the approval of the *AER* for the *distribution loss factors* it has determined for the next *financial year*.

3.6.4 Network constraints

(a) Conveyance of electricity between *regions* through a *regulated interconnector* is *constrained* when for operational reasons it is not acceptable for the *regulated interconnector* to transfer the level of electricity between *regions* that would be transferred if the limitation was removed and the condition impacts on the *dispatch* of other *regulated interconnectors, generation, scheduled network services* or *loads.*

(a1) Conveyance of electricity between *regions* by means of a *scheduled network service* is *constrained* when the *dispatch* of the relevant *scheduled network service* is limited by the notified available capacity or *ramp rate* and the limitation impacts on the *dispatch* of *generation, regulated interconnectors,* other *scheduled network services* or *loads.*

(b) Conveyance of electricity within a *region* is *constrained* when for operational reasons it is not acceptable for a *network* to transfer the level of electricity between different parts of the *region* that would be transferred if the limitation was removed and the condition impacts on the *dispatch* of *generation, scheduled network services* or *loads*.

(c) For every *trading interval AEMO* must record any *constraints* including a description and the duration of the *constraint*.

(d) Any *constraints* which occur within a *region* or between *regions* must be taken into account in the *dispatch* process under clause 3.8.10.

3.6.5 Settlements residue due to network losses and constraints

(a) *Settlements residue* will be allocated, and distributed or recovered by *AEMO* in accordance with the following principles:

(1) full effect is to be given to the *jurisdictional derogations* contained in Chapter 9 relating to *settlements residue*;

(2) the portion of the *settlements residue* attributable to *regulated interconnectors* (as adjusted to take into account the effect of any

applicable *jurisdictional derogations* referred to in clause 3.6.5(a)(1)) will be distributed or recovered in accordance with rule 3.18;

(3) the remaining *settlements residue*, including the portion of *settlements residue* due to *intra-regional loss factors*, will be distributed to or recovered from the appropriate *Transmission Network Service Providers* (which will not include *Market Network Service Providers*);

(4) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clauses 5.7.7(aa)(3) or (ab), is a negative amount, then the amount may be recovered:

(i) to the extent to which the *settlements residue* would have been distributed in accordance with clause 3.6.5(a)(2), from *eligible persons* participating in the *auctions* conducted under rule 3.18 either from positive *settlements residue* amounts arising in the same *billing period* or otherwise as part of future *auction expense fees*; and

(ii) from the *Network Service Provider* to which the *settlements residue* would have been distributed had it been a positive amount; and

(4A) subject to clause 3.6.5(c), if the *settlements residue* arising in respect of a *trading interval*, after taking into account any adjustment in accordance with clause 5.7.7(aa)(3) or (ab), is a negative amount, then:

(i) the whole or any part of the amount may be recovered from positive *settlements residue* amounts arising in the *billing period* in which the negative *settlements residue* arose; and

(ii) if the whole or a part of the amount is not recoverable under clause 3.6.5(a)(4A)(i), the unrecovered amount may be recovered from the proceeds of the first *auction* after that *billing period*; and

(iii) if the whole or a part of the amount is recoverable under neither clause 3.6.5(a)(4A)(i) nor clause 3.6.5(a)(4A)(ii), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.

(4B) subject to clause 3.6.5(a)(4A), interest costs incurred by *AEMO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) may be recovered:

(i) from proceeds of the first *auction* after the *billing period* in which the interest costs arose; and

(ii) if the whole or a part of the interest costs are not recoverable under clause 3.6.5(a)(4B)(i), unrecovered interest costs may be recovered from the proceeds of successive *auctions* until all the interests costs are recovered.

(5) for the purposes of the distribution or recovery of *settlements residue* that is attributable to *regulated interconnectors*:

(i) all of the *settlements residue* relating to electricity that is transferred from one *region* (the "exporting region") to another *region* (the "importing region") must be allocated to *Network Service Providers* in respect of a *network* located in the importing region (or part of a *network* located in the importing region);

(ii) the importing region must, in respect of the period from *market commencement* until the expiry date referred to in subparagraph (iv), pay a charge to the exporting region reflecting the extent of the use of a *network* located in the exporting region (or part of a *network* located in the exporting region) to transfer the electricity from the exporting region to the importing region;

(iii) the amount of the charge described in subparagraph (ii) must not exceed the amount of the *settlements residue* referred to in subparagraph (i), and must be agreed between the *participating jurisdictions* in which the importing region and the exporting region are located; and

(iv) the expiry date referred to in subparagraph (ii), means 1 July 2012 or the date of commencement of rules which make alternative provision in the *Rules* for inter-regional *settlements*, whichever is the earlier date; and

(6) any portion of *settlements residue* distributed to a *Network Service Provider* or amount paid on that portion under clause 3.15.10A (if any), or rule 3.18 to a *Network Service Provider*, including any such payments as adjusted by a *routine revised statement* or *special revised statement* issued under rule 3.15, net of any portion of *settlements residue* recovered from the *Network Service Provider* in accordance with clause 3.6.5(a)(4), will be used to offset *network service* charges.

(b) A *Transmission Network Service Provider* or its jurisdictional delegate is a *Market Participant* for the purposes of clause 3.3.1 and rule 3.15 (excluding clause 3.15.1(b)) but not otherwise.

(c) Subject to clauses 11.1.1 and 11.1.2:

(i) clause 3.6.5(a)(4) does not have effect during the period commencing on 1 July 2006 and ending at the last moment of 30 June 2010 but comes into effect again at the end of that period; and

(ii) clauses 3.6.5(a)(4A) and (4B) expire at the end of that period.

3.7 Projected Assessment of System Adequacy

3.7.1 Administration of PASA

(a) *AEMO* must administer medium term and short term *projected assessment of system adequacy processes* to be known as *PASA*.

(b) The *PASA* is a comprehensive program of information collection, analysis, and disclosure of medium term and short term *power system security* prospects so that *Scheduled Generators* and *Market Participants* are properly informed to enable them to make decisions about *supply*, demand and *outages* of *transmission networks* in respect of periods up to 2 years in advance.

(c) On a weekly basis *AEMO* must:

(1) collect and analyse information from all *Scheduled Generators*, *Market Customers*, *Transmission Network Service Providers* and *Market Network Service Providers* about their intentions for:

(i) *generation, transmission* and *Market Network Service* maintenance scheduling;

(ii) intended *plant* availabilities;

(iii) *energy constraints*;

(iv) other *plant* conditions which could materially impact upon *power system security*; and

(v) significant changes to *load* forecasts previously notified to *AEMO*,

for the following 24 months;

(2) prepare the *unconstrained intermittent generation forecasts* for the following 24 months; and

(3) following analysis and assessment of the information referred to subparagraphs (1) and (2), *publish* information that will:

(i) assist *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to plan any scheduled work on *plant*; and

(ii) inform the *market* of possible *power system security* problems.

(d) *AEMO* must use its reasonable endeavours to ensure that it provides to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* sufficient information to allow *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to undertake maintenance and *outage* planning without violating *power system security* and to allow the *market* to operate effectively with a minimal amount of intervention by *AEMO*.

3.7.2 Medium term PASA

(a) The *medium term PASA* covers the 24 month period commencing from the *day* 8 *days* after the *day* of publication with a daily resolution, and must be reviewed and issued every week by *AEMO* in accordance with the *timetable*.

(b) *AEMO* may *publish* additional updated versions of the *medium term PASA* in the event of *changes* which, in the judgment of *AEMO*, are materially significant and should be communicated to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*.

(c) The following *PASA* inputs are to be prepared by *AEMO*:

(1) forecast *load* which is:

(i) to indicate for each *region* the most probable *peak load*, time of the peak, and daily *energy* on the basis of past trends, day type and special events including all anticipated *scheduled load* and other *load* except pumped storage *loads*;

(ii) subsequently to be adjusted by an amount anticipated in the forecast as *scheduled load* by *load* bidders; and

(iii) an indicative half hourly *load* profile for each day type for each *region* for each month of the year;

(2) reserve requirements of each *region* determined in accordance with the *medium term capacity reserve standards* set out in the *power system security and reliability standards*;

(3) forecast *inter-regional network constraints* and *intra-regional network constraints* known to *AEMO* at the time; and

(4) an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *day*.

(d) The following *medium term PASA* inputs must be submitted by each relevant *Scheduled Generator* or *Market Participant* in accordance with the *timetable*:

(1) *PASA availability* of each *scheduled generating unit, scheduled load* or *scheduled network service* for each *day*; and

(2) weekly *energy constraints* applying to each *scheduled generating unit* or *scheduled load*.

(e) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any other information on planned *network outages* that is reasonably requested by *AEMO* to assist *AEMO* to meet its obligations under paragraph (f)(6).

(f) *AEMO* must prepare and *publish* the following information in respect of each *day* covered by the *medium term PASA* in accordance with clause 3.13.4:

(1) forecasts of the most probable peak *power system load* plus required *reserve*, adjusted to make allowance for *scheduled load*, for each *region* and for the total *power system*;

(2) the aggregated MW allowance (if any) made by *AEMO* for *generation* from *non-scheduled generating systems* in each forecast of the most probable peak *power system load* referred to subparagraph (1);

(3) in respect of each forecast of the most probable peak *power system load* referred to in subparagraph (1), a value that is the sum of that forecast and the relevant aggregated MW allowance referred to in subparagraph (2);

(4) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;

(5) aggregate *generating unit PASA availability* for each *region*, calculated by adding the following categories:

(i) the capacity of *scheduled generating units* that are able to operate at the full offered *PASA availability* on a continuous basis to meet forecast *power system load*;

(ii) an allocation of *generation* that cannot be *generated* continuously at the full offered *PASA availability* of the *scheduled generating units* for the period covered due to specified weekly *energy constraints*; and

(iii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*; and

(6) identification and quantification of:

(i) any projected *violations* of *power system security*;

(ii) any *days* on which *low reserve* or *lack of reserve* conditions are forecast to apply;

(iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);

(iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only; and

(v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.

(g) *AEMO* must document the procedure it uses for preparation of the *medium term PASA* and make it available to all *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* on a cost recovery basis.

3.7.3 Short term PASA

(a) The *short term PASA* must be issued at least daily by *AEMO* in accordance with the *timetable*.

(b) The *short term PASA* covers the period of six *trading days* starting from the end of the *trading day* covered by the most recently *published pre-dispatch schedule* with a half hourly resolution.

(c) *AEMO* may *publish* additional updated versions of the *short term PASA* in the event of *changes* which, in the judgement of *AEMO*, are materially significant

and should be communicated to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*.

(d) The following *short term PASA inputs* are to be prepared by *AEMO*:

(1) forecast *load* which is to include:

(i) the most probable half hourly *profile* on the basis of past trends, day type and special events; and

(ii) all *scheduled load* and other *load* except for pumped storage *loads*,

which must subsequently be adjusted in accordance with *dispatch offers* for *scheduled load*;

(2) *reserve* requirements for each *region* determined in accordance with the *short term capacity reserve standards*;

(3) anticipated *inter-regional network constraints* and *intra-regional network constraints* known to *AEMO* at the time; and

(4) an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* for each *trading interval*.

(e) The following *short term PASA* inputs must be submitted by each relevant *Scheduled Generator* and *Market Participant* in accordance with the *timetable* and must represent the *Scheduled Generator's* or *Market Participant's* current intentions and best estimates:

(1) availability of each *scheduled generating unit*, *scheduled load* or *scheduled network service* for each *trading interval* under expected *market* conditions;

(2) *PASA availability* of each *scheduled generating unit*, *scheduled load* or *scheduled network service* for each *trading interval*;

(3) *scheduled generating unit synchronisation* and *de-synchronisation* times for *slow start generating units*; and

(4) projected daily *energy* availability for *energy constrained scheduled generating units* and *energy constrained scheduled loads*.

(f) If *AEMO* considers it reasonably necessary for adequate *power system* operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from providing inputs for the *PASA* process must do so to the extent specified by *AEMO*.

(g) *Network Service Providers* must provide to *AEMO* an outline of planned *network outages* in accordance with the *timetable* and provide to *AEMO* any other information on planned *network outages* that is reasonably requested by *AEMO* to assist *AEMO* to meet its obligations under clause 3.7.3(h)(5).

(h) *AEMO* must prepare and *publish* the following information as *short term PASA* outputs for each *trading interval* in the period covered in accordance with clause 3.13.4(c):

(1) forecasts of the most probable *power system load* plus required *scheduled reserve* adjusted to make allowance for *scheduled load*, for each *region* and for the total *power system*;

(2) forecasts of *power system load* for each *region* with 10% and 90% probability of exceedence;

(3) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;

(4) aggregate *generating unit* availability for each *region* calculated by adding the following categories:

(i) the capacity of *scheduled generating units* that are able to operate at the full offered availability on a continuous basis to meet forecast *power system load*;

(ii) an allocation of *generation* that cannot be *generated* continuously at the full offered availability of the *scheduled generating units* for the period covered due to specified daily *energy constraints*; and

(iii) the forecast *generation* of *semi-scheduled generating units* as provided by the *unconstrained intermittent generation forecasts*;

(4A) aggregate *generating unit PASA availability* for each region;

(4B) the aggregated MW allowance (if any) made by *AEMO* for generation from *non-scheduled generating systems* in each forecast:

(i) of the most probable peak *power system load* referred to in clause 3.7.3(h)(1); and

(ii)referred to in clauses 3.7.3(h)(2), (3), (4) and (4A);

(4C) in respect of each forecast:

(i) of the most probable peak *power system load* referred to in clause 3.7.3(h)(1);

(ii) referred to in clauses 3.7.3(h)(2), (3), (4) and (4A),

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.7.3(4B); and

(5) identification and quantification of:

(i) any projected *violations* of *power system security*;

(ii) any *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;

(iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in another *region* (dependent on forecast *interconnector* transfer capabilities);

(iv) forecast *interconnector* transfer capabilities and the discrepancy between forecast *interconnector* transfer capabilities and the forecast capacity of the relevant *interconnector* in the absence of outages on the relevant *interconnector* only; and

(v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.

(i) In the event that in performing the *short-term PASA AEMO* identifies any projected *low reserve* or *lack of reserve* conditions in respect of a *participating jurisdiction*, then *AEMO* must use its reasonable endeavours to advise the *Jurisdictional Co-ordinator* for that *participating jurisdiction* of any potential requirements during such conditions to shed *sensitive loads*.

(j) *AEMO* must document the procedure it uses for preparation of the *short term PASA* and make it available to all *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* on a cost recovery basis.

3.7A Market Information on planned network outages

(a) The objective of this rule 3.7A is to provide *Market Participants* with the information on planned *network outages* required so that *Market Participants* are properly informed to enable them to make projections of *market* outcomes, including projections of *settlement residue auction* outcomes, and decisions with respect to *hedge contracts* and other financial risk management tools. Information on planned *network outages* made available to *Market Participants* by *AEMO* and *Transmission Network Service Providers* under this rule 3.7A, however, represents a *Transmission Network Service Provider's* current intentions and best estimates regarding planned *network outages* at the time the information is made available. Further, a *Transmission Network Service Provider* may not be bound to comply with an advised *outage* program. A planned *outage* program may be subject to change due to unforeseen circumstances outside the control of the *Transmission Network Service Provider*. Accordingly, information on planned *network outages* may be subject to change.

(b) In addition to the obligations imposed on *Transmission Network Service Providers* and *AEMO* by rule 3.7 to provide information on planned *network outages* for the purpose of *PASA*, *Transmission Network Service Providers* must provide to *AEMO* and *publish*, and *AEMO* must determine and *publish*, the information required under this rule 3.7A with respect to planned *network outages*.

(c) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, each *Transmission Network Service Provider* must provide to *AEMO* and *publish*:

(1) details of the forecast timing and the factors affecting the timing of planned *network outages* and the likelihood that the planned timing will vary;

(2) details of the reason for the planned *network outage*, including the nature and extent of works required, if any; and

(3) any other information with respect to planned *network outages* that is reasonably requested by *AEMO* with a view to achieving the objective set out in rule 3.7A(a),

for those *network outages* planned for the following thirteen months that, in the reasonable opinion of the *Transmission Network Service Provider*, will have or are likely to have a material effect on transfer capabilities.

(d) Each month, in accordance with the *timetable* for the provision of information to *medium term PASA*, *AEMO* must determine and *publish*:

(1) an assessment of the projected impact on *intra-regional power transfer capabilities*, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner;

(2) an assessment of the projected impact on *inter-regional power transfer capabilities*, the accuracy of which must be appropriate to meet the objective in rule 3.7A(a) in a cost effective manner; and

(3) any other information with respect to planned *network outages* that, in *AEMO's* opinion, would assist in achieving the objective set out in rule 3.7A(a),

for those planned *network outages* in respect of which a *Transmission Network Service Provider* has provided information to *AEMO* under rule 3.7A(c).

3.7B Unconstrained intermittent generation forecast

(a) *AEMO* must prepare a forecast of the *available capacity* of each *semi-scheduled generating unit* (to be known as an *unconstrained intermittent generation forecast*) in accordance with this rule 3.7B for the purposes of:

(1) the *projected assessment of system adequacy process*;

(2) *dispatch*; and

(3) *pre-dispatch*.

(b) A *Semi-Scheduled Generator* must:

(1) submit to *AEMO*, in accordance with the *timetable*, the *plant availability* for each *semi-scheduled generating unit* for the purpose of paragraph (a) as soon as the *Semi-Scheduled Generator* becomes aware that the *plant availability* of the unit is at least 6MW below or above the *nameplate rating* of the unit; and

(2) where the *Semi-Scheduled Generator* has submitted *plant availability* in accordance with subparagraph (1), notify *AEMO* in accordance with the *timetable* as soon as the *Semi-Scheduled Generator* becomes aware of any changes to the *plant availability* of that *semi-scheduled generating unit* until such time as the *plant availability* of that *semi-scheduled generating unit* is no longer at least 6MW below or above the *nameplate rating* of the unit.

(c) When preparing an *unconstrained intermittent generation forecast* for the purposes referred to in paragraph (a), *AEMO* must take into account:

(1) the total registered capacity provided by the *Semi-Scheduled Generator* as part of its *registered bid and offer data*;

(2) the *plant availability* of the *semi-scheduled generating unit* submitted by the *Semi-Scheduled Generator* under paragraph (b);

(3) the information obtained for the *semi-scheduled generating unit* from the *remote monitoring equipment* specified in clause S5.2.6.1;

(4) the forecasts of the energy available for input into the electrical power conversion process for each *semi-scheduled generating unit*;

(5) the *energy conversion model* for each *semi-scheduled generating unit*;

(6) the assumption that there are no *network constraints* otherwise affecting the *generation* from that *semi-scheduled generating unit*; and

(7) the timeframes of:

(i) *pre-dispatch*;

(ii) *dispatch,*

(iii) *medium term PASA*; and

(iv) *short term PASA*.

(d) *NEMMCO* must prepare the first *unconstrained intermittent generation forecast* for *each semi-scheduled generating unit* by 31 March 2009 and there must be an *unconstrained intermittent generation forecast* for each *semi-scheduled generating unit* available at all times after that date.

3.7C Energy Adequacy Assessment Projection

Purpose of EAAP

(a) The purpose of the *energy adequacy assessment projection* (or *EAAP*) is to make available to *Market Participants* and other interested persons an analysis that quantifies the impact of *energy constraints* on *energy* availability over a 24 month period under a range of scenarios.

EAAP principles

(b) The *EAAP* must:

(1) cover a 24 month period, commencing on the day the *EAAP* is *published* under this rule 3.7C;

(2) be *published* every three months;

(3) provide a probabilistic assessment of projected *energy* availability for each *region*;

(4) provide projected *unserved energy* levels for each *region* with a monthly resolution;

(5) provide aggregated information on the adequacy of *energy* availability for each scenario that *AEMO* defines for the purposes of the *EAAP*, based on information received from *Registered Participants* and on anticipated *power system* constraints;

(6) take into account:

(A) where relevant, the information and *medium term PASA* inputs referred to in clauses 3.7.1 and 3.7.2;

(B) where relevant, the matters *AEMO* considers in, and for the purposes of, clause 5.6.5(c) in carrying out the *ANTS review*;

(C) *Generator Energy Limitation Frameworks* provided in accordance with paragraph (g), including *GELFs* that apply to more than one *scheduled generating unit* under clause 3.7C(k)(6) where those *GELFs* adequately represent the relevant *generating units*; and

(D) *GELF parameters* for each *GELF* which are provided in accordance with the *EAAP guidelines* and are updated in accordance with the *timetable*.

(c) *AEMO* must comply with the *EAAP principles* in preparing the *EAAP*.

Administration of EAAP

(d) *AEMO* must *publish* the *EAAP* every three months in accordance with the *timetable* and the first *EAAP* must be published by 31 March 2010.

(e) For the purposes of preparing the *EAAP*, *a Scheduled Generator* must provide *AEMO* with the following information in accordance with the *timetable*:

(1) updated *GELF parameters* for each *GELF* provided by it in accordance with paragraph (g); and

(2) other information that supplements the data provided under subparagraph (1) that is reasonably required by *AEMO* to study the scenarios defined in the *EAAP guidelines*.

(f) In considering whether information referred to in subparagraph (e)(2) is reasonably required, *AEMO* must have regard to the likely costs that may be

incurred by the *Scheduled Generator* in preparing and providing that information compared to the likely benefits from the use of that information for the purposes of the *EAAP*.

Generator Energy Limitation Framework

(g) A *Scheduled Generator* must prepare and submit to *AEMO*, in accordance with the *EAAP guidelines* and for the purposes of the *EAAP*, a description of the *energy constraints* that affect the ability of each of its *scheduled generating units* to generate electricity ('*GELF*' or '*Generator Energy Limitation Framework*'). The *GELF* must be in a form that adequately represents that *generating unit* sufficient for *AEMO* to include the *GELF* in the *EAAP*.

(h) A *GELF* submitted under paragraph (g) must be supplemented by *GELF parameters* for that *GELF* as defined in the *EAAP guidelines*, and those parameters must be updated every three months in accordance with the *timetable*.

(i) Where a *Scheduled Generator* has submitted a *GELF* under paragraph (g) and there has been a material *change* to any of its *scheduled generating units* which has an impact on the *energy constraints* associated with that *GELF*, the *Scheduled Generator* must revise and re-submit the *GELF* in accordance with that paragraph.

(j) Subject to paragraph (r), a *GELF* or information provided in relation to a *GELF* to *AEMO* must be treated by *AEMO* as *confidential information*.

EAAP guidelines

(k) *AEMO* must develop and *publish* guidelines (the '*EAAP guidelines*') that:

(1) define scenarios that *AEMO* must study in preparing the *EAAP*;

(2) define modelling assumptions for the *EAAP*;

(3) define the components of a *GELF* that a *Scheduled Generator* must include in a *GELF* submitted under paragraph (g);

(4) provide detail on the forms of the *GELF* sufficient for a *Scheduled Generator* to meet the requirements of paragraph (g);

(5) define variable parameters specific to a *GELF* ('*GELF parameters*') that are likely to have a material impact on the *GELF* and therefore the *EAAP*, and which may include, but are not limited to, parameters in relation to:

(i) hydro storage including pump storage;

(ii) thermal generation fuel;

(iii) cooling water availability; and

(iv) gas supply limitations;

(6) define circumstances where a *GELF* submitted under paragraph (g) can apply to a collection of *scheduled generating units* that face common *energy constraints* due to their geographic location, access to fuel source or another similar reason;

(7) define the form of information to be submitted by each *Scheduled Generator* in accordance with paragraph (e); and

(8) define arrangements for managing the confidentiality of information submitted to *AEMO* under this rule 3.7C.

(l) The scenarios that are defined for the purposes of subparagraph (k)(1) may include, but are not limited to:

(1) water conditions such as normal rainfall and drought;

(2) material restrictions on the supply of a significant fuel source;

(3) other limits on a fuel source for a major form of generation; and

(4) any other scenario that *AEMO* reasonably considers will have a material impact on the *EAAP*.

(m) *AEMO* must comply with the *EAAP principles* in preparing the *EAAP guidelines*.

(n) *AEMO* must comply with the *EAAP guidelines* in preparing the *EAAP*.

(o) *AEMO* must develop and *publish* the *EAAP guidelines* in accordance with the *Rules consultation procedures*.

(p) *NEMMCO* must develop and *publish* the first *EAAP guidelines* by 30 June 2009 and there must be a set of *EAAP guidelines* available at all times after that date.

(q) *AEMO* may from time to time in accordance with the *Rules consultation procedures* amend or replace the *EAAP guidelines*.

Provision of information to Scheduled Generators

(r) *AEMO* must provide to each *Scheduled Generator*, based on the relevant *GELF*, an estimate of the total *energy* production of the *scheduled generating units* of that *Scheduled Generator* for the period of the *EAAP*.

Review

(s) The *Reliability Panel* must conduct a review of the operation of this rule 3.7C by no later than the end of the third year after the *publication* of the first *EAAP*.

3.8 Central Dispatch and Spot Market Operation

3.8.1 Central Dispatch

(a) *AEMO* must operate a *central dispatch* process to *dispatch scheduled generating units*, *semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *market ancillary services* in order to balance *power system supply* and demand, using its reasonable endeavours to maintain *power system security* in accordance with Chapter 4 and to maximise the value of *spot market* trading on the basis of *dispatch offers* and *dispatch bids*.

(b) The *central dispatch* process should aim to maximise the value of *spot market* trading i.e. to maximise the value of *dispatched load* based on *dispatch bids* less the combined cost of *dispatched generation* based on *generation dispatch offers*, *dispatched network services* based on *network dispatch offers*, and *dispatched market ancillary services* based on *market ancillary service offers* subject to:

(1) *dispatch offers*, *dispatch bids* and *market ancillary service offers*;

(2) *constraints*:

(i) due to availability and *commitment*; or

(ii) in the case of *semi-scheduling generating units*, identified by the *unconstrained intermittent generation forecast*;

(3) *non-scheduled load* requirements in each *region*;

(4) *power system security* requirements determined as described in Chapter 4 and the *power system security and reliability standards*;

(5) *intra-regional network constraints* and *intra-regional losses*;

(6) *inter-regional network constraints* and *inter-regional losses*;

(7) *constraints* consistent with *registered bid and offer* data;

(8) current levels of *dispatched generation*, *load* and *market network services*;

(9) *constraints* imposed by *ancillary services* requirements;

(10) arrangements designed to ensure pro-rata loading of tied *registered bid and offer data*; and

(11) ensuring that as far as reasonably practical, in relation to a *AEMO intervention event*:

(A) the number of *Affected Participants*; and

(B) the effect on *interconnector* flows,

is minimised.

(c) *AEMO* must establish procedures to allow relaxation of *power system constraints* listed in clause 3.8.1(b) in order to resolve infeasible *dispatch* solutions, subject to the following principles:

(1) the procedures are developed in consultation with *Registered Participants* to achieve a reasonable *dispatch* outcome while maintaining consistency with *AEMO's* obligations to maintain *power system security* and the pricing principles listed in clause 3.9.1; and

(2) *AEMO* must report to *Registered Participants* any events requiring the relaxation of these *constraints*.

(d) *AEMO* must develop and *publish* a *dispatch algorithm* to be used by *AEMO* for the purpose of *central dispatch* and pricing in accordance with rules 3.8 and 3.9.

(e) *AEMO* must use the *dispatch algorithm* to determine the *loading level* in MW for each *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* in each *dispatch interval* in accordance with the principles set out in clause 3.8.1(b).

(e1) *AEMO* must use the *dispatch algorithm* to determine the quantity of each *market ancillary service* which will be *enabled* for each *ancillary service generating unit* or *ancillary service load*.

(e2) When *AEMO* determines the quantity of each *market ancillary service* which will be *enabled, AEMO* must determine:

(1) the required quantity of each *market ancillary service* that may be sourced from any *region* (referred to as the "*global market ancillary service requirement*"); and

(2) any required quantity of such *market ancillary service* which must only be sourced from one or more nominated *regions (*referred to as a "*local market ancillary service requirement*"*)*.

(f) *AEMO* may investigate from time to time:

(1) the scope for further development of the *dispatch algorithm* beyond the minimum requirements specified in clause 3.8.1(b); and

(2) the sufficiency of the *dispatch algorithm* in meeting the minimum requirements specified in clause 3.8.1(b),

and following compliance with the *Rules consultation procedures*, *publish* a report setting out its recommendations.

3.8.2 Participation in central dispatch

(a) A *Generator* must submit *generation dispatch offers* in respect of its *scheduled generating units* or *semi-scheduled generating units* (as the case may be) for each *trading day* in accordance with clause 3.8.6.

(b) *Generation dispatch offers* for a *scheduled generating unit* must include a specified *self-dispatch level* and may include prices and MW quantities for increased or decreased levels of *generation* above or below this *self-dispatch level*.

(b1) A *Scheduled Network Service Provider* must submit *network dispatch offers* in respect of each of its *scheduled network services* for each *trading day* in accordance with clause 3.8.6A.

(c) Subject to clause 3.8.2(d), *dispatch bids* may be submitted by *Market Participants* in respect of *scheduled loads*, in accordance with clause 3.8.7, and may specify prices and MW quantities for any *trading interval* either for reductions or increases in *load*.

(c1) *Market ancillary service offers* may be submitted by *Ancillary Service Providers* in respect of *market ancillary service*s in accordance with clause 3.8.7A.

(d) *Dispatch bids* and *market ancillary service offers* will only be included in the *central dispatch* process by *AEMO* if it is satisfied that adequate communication and/or telemetry is available to support the issuing of *dispatch instructions* and the audit of responses.

(e) If *AEMO* considers it reasonably necessary for adequate system operation and the maintenance of *power system security*, *Registered Participants* who may otherwise be exempted from participating in the *central dispatch* process must do so to the extent and in the capacity specified by *AEMO*.

3.8.3 Bid and offer aggregation guidelines

(a) *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* who wish to aggregate their relevant *generating units*, *scheduled network services* or *scheduled loads* for the purpose of *central dispatch* must apply to *AEMO* to do so.

(b) *AEMO* must approve applications for aggregation made under paragraph (a) if the following conditions are fulfilled:

(1) aggregated *generating units* or *loads* must be *connected* at a single site with the same *intra-regional loss factor* and be operated by a single *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant*;

(2) aggregated *scheduled network services* must be *connected* at the same two sites, have the same *intra-regional loss factors*, have the same *distribution loss factors* where applicable and be operated by the same *Generator* or *Market Participant*;

(3) *power system security* must not be materially affected by the proposed aggregation; and

(4) *control systems* such as *automatic generation control systems* must satisfy the *Rules* after aggregating.

(c) Notwithstanding that one or more of the conditions set out in paragraph (b) may not have been fulfilled by the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant*, *AEMO* may approve an application for aggregation provided that such aggregation would not materially distort *central dispatch*.

(d) Subject to paragraph (f), for the purposes of Chapter 3 (except rule 3.7B) and rule 4.9, a reference to a *generating unit, scheduled load* and *scheduled network service* is only taken as a reference to aggregated *generating units*, aggregated *scheduled network services* and aggregated *scheduled loads* aggregated in accordance with this clause 3.8.3.

(e) *AEMO* must evaluate applications for aggregation and reply within 20 *business days* of receipt of the application setting out whether the application is to be approved and the conditions that apply to the proposed approval.

(f) *Scheduled Generators* and *Market Participants* that have been granted aggregated status must, if required by *AEMO,* declare individual *scheduled generating unit*, *scheduled network service* or *scheduled load* availability and operating status to *AEMO* in the *PASA* process under rule 3.7 to allow *power system security* to be effectively monitored.

(g) If a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant's* application for aggregation is denied by *AEMO*, *AEMO* must provide that applicant with reasons for that denial.

(h) *AEMO* must maintain a database of aggregated *scheduled generating units*, *semi-scheduled generating units, scheduled network services* and *scheduled loads* and their components.

(i) For the avoidance of doubt, *semi-scheduled generating units* which are registered as a single *semi-scheduled generating unit* under clause 2.2.7 are not aggregated *semi-scheduled generating units* for the purposes of Chapter 3 and rule 4.9.

3.8.3A Ramp rates

(a) This clause 3.8.3A applies to a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* with *generating units*, *scheduled network services* and/or *scheduled loads* providing *ramp rates* to *AEMO* in accordance with the following clauses:

(1) with respect to notification of scheduled capacity prior to *dispatch*:

(i) clause 3.8.4(c);

(ii) clause 3.8.4(e);

(iii) clause 3.8.4(d);

(2) with respect to offers for *dispatch*:

(i) clause 3.8.6(b);

(ii) clause 3.8.6(g);

(iii) clause 3.8.6A(b);

(iv) clause 3.8.7(c); and

(3) with respect to *rebids*, clause 3.8.22(b)

(b) Subject to clauses 3.8.3A(c) and 3.8.3A(i), a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies must provide an up *ramp rate* and a down *ramp rate* to *AEMO* for each *generating unit*, *scheduled network service* and/or *scheduled load* that is:

(1) at least:

(i) 3MW/minute in the case of a *scheduled network service* or *scheduled load*; or

(ii) the lower of:

(A) 3MW/minute or 3% of the registered full *load* (MW generated) in the case of a *scheduled generating unit*; or

(B) 3MW/minute or 3% of the registered capacity in the case of a *semi-scheduled generating unit*,

provided in accordance with clause 3.13.3(b), expressed as MW/minute rounded down to the nearest whole number except where this would result in the nearest whole number being zero, in which case the up *ramp rate* and/or down *ramp rate* is deemed to be 1 MW/minute; and

(2) at most the relevant *maximum ramp rate* provided in accordance with clause 3.13.3(b).

(c) A *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies may provide a *ramp rate* to *AEMO* that is less than that specified in clause 3.8.3A(b)(1) if the *ramp rate* is affected by an event or other occurrence that:

(1) physically prevents the relevant *generating unit, scheduled load* or *scheduled network service* from attaining a *ramp rate* of at least that specified in clause 3.8.3A(b)(1); or

(2) makes it unsafe for the relevant *generating unit, scheduled load* or *scheduled network service* to operate at a *ramp rate* of at least that specified in clause 3.8.3A(b)(1),

for the period of time in which the *ramp rate* is so affected by that event or other occurrence.

(d) If a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than that specified in clause 3.8.3A(b)(1), it must provide a *ramp rate* to *AEMO* that is

the maximum the relevant *generating unit, scheduled load* or *scheduled network service* can safely attain at that time.

(e) If a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *ramp rate* that is less than that specified in clause 3.8.3A(b)(1), it must simultaneously provide *AEMO* with a brief, verifiable and specific reason why the *ramp rate* is below that specified in clause 3.8.3A(b)(1).

(f) The *AER* may require, upon written request, the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to provide such additional information as it may require from time to time to substantiate and verify the reason provided in clause 3.8.3A(e).

(g) The *AER* must exercise its powers under clause 3.8.3A(f) in accordance with any guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures.*

(h) If a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies provides a *maximum ramp rate* in accordance with clause 3.13.3(b) of less than that specified in clause 3.8.3A(b)(1), it must provide *AEMO* with a brief, verifiable and specific reason why the *ramp rate* is below that specified in clause 3.8.3A(b)(1).

(i) Clauses 3.8.3A(b), 3.8.3A(c) and 3.8.3A(e) do not apply to a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* to which this clause 3.8.3A applies if*:*

(1) it has provided a *maximum ramp rate* in accordance with clause 3.13.3(b) which is less than that specified in clause 3.8.3A(b)(1); and

(2) it has notified *AEMO* of this in accordance with clause 3.8.3A(h).

(j) In addition to the obligations in clause 3.8.3A(d), if clause 3.8.3A(i) applies, the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* must only provide *ramp rates* that are, at most, the *maximum ramp rate* for the relevant *generating unit, scheduled load* or *scheduled network service* in accordance with clause 3.13.3(b).

3.8.4 Notification of scheduled capacity

All *Scheduled Generators* and *Market Participants* with *scheduled generating units*, *scheduled network services* and/or *scheduled loads* must inform *AEMO* of their available capacity as follows in accordance with the *timetable*:

(a) *Scheduled Generators* and *Market Participants* must notify *AEMO* of the available capacity of each *scheduled generating unit*, *scheduled network service* and/or *scheduled load* for each *trading interval* of the *trading day*;

(b) subsequent *changes* may only be made to the information provided under clause 3.8.4(c), (d) and (e) in accordance with clause 3.8.22;

(c) for *Scheduled Generators*, two *days* ahead of each *trading day*:

(1) a MW capacity profile that specifies the MW available for each of the 48 *trading intervals* in the *trading day*;

(2) estimated *commitment* or *decommitment* times;

(3) daily *energy* availability for *energy constrained generating units*; and

(4) an up *ramp rate* and a down *ramp rate*;

(d) for *scheduled loads*, two *days* ahead of each *trading day*:

(1) a MW capacity profile that specifies the MW available for *dispatch* for each of the 48 *trading intervals* in the *trading day*;

(2) daily *energy* availability for *energy constrained scheduled load*; and

(3) an up *ramp rate* and a down *ramp rate*;

(e) for *scheduled network services*, two *days* ahead of each *trading day*:

(1) a MW capacity profile that specifies the *power transfer capability* in each direction available for each of the 48 *trading intervals* in the *trading day;* and

(2) an up *ramp rate* and a down *ramp rate*.

3.8.5 Submission timing

(a) To be valid for inclusion in the *central dispatch* process, a *dispatch bid* or *dispatch offer* or *market ancillary service offer* must be submitted according to the *timetable*.

(b) Subject to clause 3.8.22, changes to the:

(1) MW quantities in the *dispatch bids;*

(2) MW quantities and *off-loading prices* in the *generation dispatch offers*; and

(3) MW quantities in the *network dispatch offers*,

may be made after the relevant deadline in the *timetable.*

(c) The submission of *dispatch bids*, *dispatch offers* and *market ancillary service offers* to *AEMO* must be made using the *electronic communication system* unless otherwise approved by *AEMO*.

3.8.6 Generating unit offers for dispatch

Scheduled Generator

(a) A *Scheduled Generator's dispatch offer* must:

(1) contain its intended *self-dispatch level* for each *trading interval*, and may contain up to 10 *price bands* which may be for:

(i) possible *dispatch* above the intended *self-dispatch level*; or

(ii) possible *off-loading* below the intended *self-dispatch level*,

by *dispatch instruction*;

(2) specify for each of the 48 *trading intervals* in the *trading day*:

(i) a MW capacity for the intended *self-dispatch level;*

(ii) an incremental MW amount for each *price band* specified in the *dispatch offer*; and

(iii) an up *ramp rate* and a down *ramp rate*;

(3) where the offer specifies a *self-dispatch level* of more than zero, specify at least one *price band* for *off-loading* below the intended *self-dispatch level* and the total MW quantity in *price bands* specified for *off-loading* in each *trading interval* must equal the MW quantity of the *self-dispatch level* for that *trading interval* to enable possible *off-loading* to a zero *dispatch* level; and

(4) specify a *loading price* or an *off-loading price* for each *price band* specified in the *dispatch offer*, in dollars and whole cents per MWh, and this price is to apply to the *price band* throughout the *trading day*.

(b) A *Scheduled Generator's dispatch offer* may specify the daily *energy* available for *energy constrained scheduled generating units*.

(c) A *Scheduled Generator's loading prices* offered must be equal to or greater than $0/MWh and may not exceed the product of the *market price cap* multiplied by the *intra-regional loss factor* at the *Scheduled Generator's transmission network connection point* for the *scheduled generating unit*.

(d) A *loading price* of a *Scheduled Generator* specified for a *price band* is to be interpreted as the minimum price at which up to the specified MW increment is to be loaded in the *central dispatch* process.

(e) A *Scheduled Generator's off-loading prices* must be less than $0/MWh, that is, negative in sign and may not be less than the product of the *market floor price* multiplied by the *intra-regional loss factor* at the *Scheduled Generator's transmission network connection point* for the *scheduled generating unit*.

(f) An *off-loading price* of a *Scheduled Generator* specified for a *price band* is to be interpreted as the maximum price payable to *AEMO* by the *Scheduled Generator* in respect of the *generating unit*'s *sent out generation* with the *generating unit's* output reduced below its specified *self-dispatch level* in the *central dispatch* process by an amount less than the specified MW increment.

Semi-Scheduled Generator

(g) A *Semi-Scheduled Generator's dispatch offer* may contain up to 10 *price bands* and must specify for each of the 48 *trading intervals* in the *trading day*:

(1) an incremental MW amount for each *price band* specified in the *dispatch offer*; and

(2) an up *ramp rate* and a down *ramp rate*.

Semi-Scheduled and Scheduled Generators

(h) A *dispatch offer* of a *Semi-Scheduled Generator* or *Scheduled Generator* must meet the following requirements:

(1) the MW quantities specified are to apply at the terminals of the *semi-scheduled generating unit* or *scheduled generating unit* or, with *AEMO*'s agreement, at any other point in the relevant *Generator's* electrical installation or on the *network*;

(2) prices specified for each *price band* specified in the *dispatch offer* must increase monotonically with an increase in available MWs;

(3) prices specified are to apply at the *connection point* of the *semi-scheduled generating unit* or the *scheduled generating unit* (as the case may be) and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

RP = DOP ÷ LF

where

RP is the price specified in the *dispatch offer* when referred to the appropriate *regional reference node* and must not be greater than the *market price cap* or less than the *market floor price*;

DOP is the price as specified in the *dispatch offer*; and

LF where the *connection point*:

(i) is a *transmission network connection point*, is the *intra-regional loss factor* at that *connection point*; or

(ii) is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the *intra-regional loss factor* at the *transmission network connection point* to which it is assigned; and

(4) the MW quantity specified in each *price band* in each *trading interval* must be specified in whole MW.

3.8.6A Scheduled network service offers for dispatch

The following requirements apply to a *network dispatch offer* to provide *scheduled network services*:

(a) the *network dispatch offer* may contain up to a maximum of ten *price bands* for each direction of power flow for the *scheduled network service;*

(b) the *network dispatch offer* must specify for each of the 48 *trading intervals* in the *trading day*:

(1) an incremental power delivery range for each *price band* specified in the *network dispatch offer*; and

(2) an up *ramp rate* and a down *ramp rate*;

(c) the *network dispatch offer* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day;*

(d) within the set of *price bands* applying to a particular direction of power flow, prices specified for each *price band* specified in the *network dispatch offer* must increase monotonically with an increase in available MWs;

(e) if negative prices are employed, the absolute value of the most negative price in one direction cannot exceed the price for the first *price band* in the opposite direction, after adjustment for losses;

(f) the price specified in a *price band* for power transfer from the *scheduled network service's connection point* A to *connection point* B is to be interpreted in the *central dispatch* process as meaning that the *Scheduled Network Service Provider* is willing to deliver an increment of power to *connection point* B, within the power delivery range of the power band, provided that the net revenue which is expected to be derived from that increment per MWh delivered to *connection point* B is not less than the specified price;

(g) for the purposes of this clause 3.8.6A, the net revenue that a *Scheduled Network Service Provider* expects to receive for energy delivered by the *scheduled network service* to *connection point* B is to be determined as follows:

net revenue = PB × FB – PA × FA

where

PA and PB — are the prices at the *scheduled network service's connection points* A and B, which are assumed not to change as a result of the incremental transfer;

FA and FB — are the energy transfers scheduled by *central dispatch* for receipt by the *scheduled network service* at *connection point* A and delivery at *connection point* B respectively; and

FA and FB — are deemed to be related by the loss vs flow relationship notified in accordance with schedule 3.1;

(h) for the purposes of this clause 3.8.6A, the price at a *connection point* will be deemed to be related as follows to the price at the *regional reference node* to which that *connection point* is assigned:

P = RP x LF

where

Pis the price at the *connection point*;

RPis the price at the appropriate *regional reference node*; and

LF where the *scheduled network service's connection point* is a *transmission network connection point*, is the *intra-regional loss factor* at that *connection point*, or where the *scheduled network service's connection point* is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the *intra-regional loss factor* at the *transmission network connection point* to which it is assigned;

(i) prices specified in the *network dispatch offer* must not exceed the *market price cap*; and

(j) the power delivery range specified in each *price band* in each *trading interval* must be specified in whole MW.

3.8.7 Bids for scheduled load

The following requirements apply to a *dispatch bid* for *scheduled loads*:

(a) the *dispatch bid* must specify whether the *scheduled load* is to be considered as *normally on* or *normally off*;

(b) the *dispatch bid* may contain up to a maximum of ten *price bands*;

(c) the *dispatch bid* must specify for each of the 48 *trading intervals* in the *trading day*:

(1) an incremental MW amount for each *price band* specified in the *dispatch bid*; and

(2) an up *ramp rate* and a down *ramp rate*;

(d) the *dispatch bid* must specify a price for each *price band* in dollars and whole cents per MWh and this price is to apply to the *price band* throughout the *trading day*;

(e) prices specified for each *price band* specified in the *dispatch bid* must increase monotonically with an increase in available MWs;

(f) prices specified are to apply at the *scheduled load's connection point* and for the purposes of *central dispatch* shall be referred to the *regional reference node* to which that *connection point* is assigned as follows:

$$RP = DOP \div LF$$

where

RP is the price specified in the *dispatch bid* when referred to the appropriate *regional reference node*;

DOP is the price as specified in the *dispatch bid*; and

LF where the *scheduled load's connection point* is a *transmission network connection point*, is the *intra-regional loss factor* at that *connection point*, or where the *scheduled load's connection point* is a *distribution network connection point*, is the product of the *distribution loss factor* at that *connection point* multiplied by the *intra-regional loss factor* at the *transmission network connection point* to which it is assigned;

(g) MW quantities specified for a *price band* are to apply at the *scheduled load's connection point* or at any other point in the *Market Participant's* electrical installation or on the *network* as agreed to by *AEMO*;

(h) prices specified must be:

(1) more than the product of the *market floor price* multiplied by the *intra-regional loss factor* at the *scheduled load's transmission network connection point*; and

(2) less than the product of the *market price cap* multiplied by the *intra-regional loss factor* at the *scheduled load's transmission network connection point*;

(i) for a *scheduled load* specified in the *dispatch bid* as being *normally on*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or above which the *scheduled load* will reduce electricity consumed by up to the MW increment specified in that *price band*;

(j) for a *scheduled load* specified in the *dispatch bid* as being *normally off*, the price specified for a *price band* is to be interpreted in the *central dispatch* process as the price at or below which the *scheduled load* will increase electricity consumed by up to the MW increment specified in that *price band*;

(k) the MW capacity quantity specified in each *price band* in each *trading interval* must be specified in whole MW;

(l) the sum of the MW quantities specified in each *price band* in any *trading interval* must not exceed the maximum capacity of the *scheduled load*; and

(m) the *dispatch bid* may specify the daily *energy* available for *energy constrained scheduled loads*.

3.8.7A Market ancillary services offers

The following requirements apply to all *market ancillary service offers* for each type of *market ancillary service*:

(a) the *market ancillary service offer* may contain up to 10 *price band*s;

(b) the *market ancillary service offer* must specify for each of the 48 *trading intervals* in the *trading day* an incremental MW amount for each *price band* specified in the *market ancillary service offer*;

(c) the MW quantities specified are to apply at the nominated *connection point* of the *Market Participant* or, with *AEMO's* agreement, at any other point in the *Market Participant's* electrical installation or on the *network*;

(d) the *ancillary service offer* must specify a price for each *price band* specified in the *market ancillary service offer*, in dollars and whole cents per MW per hour (an '*enabling price*'), and this price is to apply to the *price band* throughout the *trading day*;

(e) *enabling prices* for each *price band* specified in the *market ancillary service offer* must increase monotonically with an increase in available MWs;

(f) *enabling prices* are to apply at the nominated *connection point* of the *Market Participant* or, with *AEMO's* agreement, at any other point in the *Market Participant's* electrical installation or on the *network*;

(g) *enabling prices* offered must be equal to or greater than $0 per MW per hour and may not exceed the *market price cap*;

(h) the *enabling price* for a *price band* is to be interpreted as the minimum price at which up to the specified MW response is to be enabled in the *central dispatch* process;

(i) the MW quantity in each *price band* in each *trading interval* must be specified in whole MW;

(j) the *market ancillary service offer* must include the following values:

(1) the *response breakpoint*;

(2) the upper and lower *enablement limits*; and

(3) the *response capability*;

(k) an *Ancillary Service Provider* that submits a *market ancillary service offer* must ensure that the *ancillary service generating unit* or *ancillary service load*, as the case may be, is at all times capable of responding in the manner contemplated by the *market ancillary service specification*;

(l) the values associated with a *market ancillary service offer* referred to in clause 3.8.7A(j) must represent technical characteristics of the *ancillary service generating unit* or *ancillary service load*; and

(m) rebids made under clause 3.8.22 of the values associated with the *market ancillary service offer* referred to in clause 3.8.7A(j) must represent technical characteristics at the time of *dispatch* of the *ancillary service generating unit* or *ancillary service load*.

3.8.8 Validation of dispatch bids and offers

(a) If a *dispatch offer*, *dispatch bid* or *market ancillary service offer* is made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), *AEMO* must make available to the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* who submitted the *dispatch offer*, *dispatch bid* or *market ancillary service offer* the following information without delay:

(1) acknowledgement of receipt of a valid *dispatch offer, dispatch bid* or *market ancillary service offer*; and

(2) the data contained in the *dispatch offer*, *dispatch bid* or *market ancillary service offer* as it will be used by *AEMO* in the *central dispatch* process.

(b) It is the responsibility of each *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* to check that the data contained in its *dispatch offer*, *dispatch bid* or *market ancillary service offer* as received and to be used by *AEMO* in the *central dispatch* process is correct.

(c) If a *dispatch offer, dispatch bid* or *market ancillary service offer* is not made in accordance with clauses 3.8.6, 3.8.6A, 3.8.7 or 3.8.7A (whichever is applicable), *AEMO* must not include that *dispatch offer, dispatch bid* or *market ancillary service offer* in the *central dispatch* process and must without delay notify the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* submitting the *dispatch offer, dispatch bid* or *market ancillary service offer* of its invalidity and provide to that *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* details of the invalid data.

(d) If any details contained within a *dispatch offer*, *dispatch bid* or *market ancillary service offer* are inconsistent with the *registered bid and offer data* provided by the relevant *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* then *AEMO* has the right to treat that *dispatch offer*, *dispatch bid* or *market ancillary service offer* as invalid and if it does so must notify the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* without delay.

3.8.9 Default offers and bids

(a) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may, at any time, submit a *dispatch offer*, a *dispatch bid* or a *market ancillary service offer* in respect of a *scheduled generating unit, semi-scheduled generating unit, scheduled load, scheduled network service, ancillary service generating unit* or *ancillary service load* to apply from a specified future *trading day*.

(b) A *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* may vary or withdraw a *default dispatch bid*, *default dispatch offer* or *market ancillary service offer* at any time prior to the deadline for submissions of *dispatch offers, dispatch bids* and *market ancillary service offers* for a *trading day* in accordance with the *timetable*.

(c) Subject to any procedures *published* in accordance with clause 3.8.9(d), *default dispatch offer*, *default dispatch bid* or *market ancillary service offer* applicable to a *trading day* must be included by *AEMO* in the *central dispatch* process when the deadline for submission of *dispatch offers, dispatch bids* and *market ancillary service offers* for that *trading day* arrives in accordance with the *timetable* if, and only if, no later valid *dispatch offer, dispatch bid* or *market ancillary service offer* has been submitted pursuant to clauses 3.8.6, 3.8.6A, 3.8.7, 3.8.7A or 3.8.9(b).

(d) *AEMO*, in consultation with *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* in accordance with the *Rules consultation procedures,* must develop and *publish* procedures to determine the circumstances when *AEMO* may use a prior *dispatch offer* or *dispatch bid* lodged by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* as a substitute for a *default dispatch offer* or *default dispatch bid*.

(e) *AEMO* may disregard a *default dispatch offer* or a *default dispatch bid* and substitute a prior *dispatch offer* or *dispatch bid* or *market ancillary service offer* lodged by a *Scheduled Generator*, *Semi-Scheduled Generator* or a *Market Participant* determined in accordance with a procedure developed under clause 3.8.9(d) as input to *PASA, pre-dispatch* and *central dispatch*.

3.8.10 Network constraints

(a) In accordance with the *AEMO power system security responsibilities* and any other standards set out in Chapter 4, *AEMO* must determine any *constraints* on the *dispatch* of *scheduled generating units*, *semi-scheduled generating units*, *scheduled network services*, *scheduled loads*, *ancillary service generating units* or *ancillary service loads* which may result from planned *network outages*.

(b) *AEMO* must represent *intra-regional network constraints* and *inter-regional network constraints* as inputs to the *dispatch* process in a form that can be reviewed after the *trading interval* in which they occurred.

(c) The process used by *AEMO* to derive the *network constraints* must be clearly documented and made available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*.

3.8.11 Ancillary services constraints

(a) *AEMO* must determine the quantity and nature of *ancillary services* which:

(1) have been provided or procured in accordance with the *AEMO power system security responsibilities* set out in clause 4.3.1 or are otherwise available;

(2) are required to be managed in conjunction with *dispatch*; and

(3) may impose constraints on *central dispatch*.

(a1) For each *dispatch interval AEMO* must impose constraints upon the *dispatch algorithm* to determine the quantity of each *global market ancillary service requirement* and any *local market ancillary service requirements*.

3.8.12 System scheduled reserve constraints

AEMO must use its reasonable endeavours to ensure that the *dispatch* process meets all requirements for *scheduled reserves* as described in Chapter 4.

3.8.13 Notification of constraints

AEMO must *publish* the parameters used in the *dispatch algorithm* for the modelling of *network constraints*, *regulating capability constraints*, *power system reserve constraints* and *ancillary services*.

3.8.14 Dispatch under conditions of supply scarcity

During times of *supply* scarcity, *AEMO* must use its reasonable endeavours to ensure that the actions set out below occur in the following sequence:

(a) subject to:

(1) any adjustments which may be necessary to implement action under paragraph (c); and

(2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

all valid *dispatch bids* and *dispatch offers* submitted by *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* are *dispatched*, including those priced at the *market price cap*;

(b) subject to:

(1) any adjustments which may be necessary to implement action under paragraph (c); and

(2) any *plant* operating restrictions associated with a *relevant AEMO intervention event*,

after all valid *dispatch bids* and *dispatch offers* referred to in paragraph (a) have been exhausted, exercise the *reliability and emergency reserve trader* in accordance with rule 3.20 by:

(3) *dispatching scheduled generating units*, *scheduled network services* or *scheduled loads* in accordance with any *scheduled reserve contract*; or

(4) *activating loads* or *generating units* under any *unscheduled reserve contract*; and

(c) any further corrective actions required are implemented in accordance with clauses 4.8.5B and 4.8.9.

3.8.15 [Deleted]

3.8.16 Equal priced dispatch bids and dispatch offers

If there are *scheduled generating units*, *semi-scheduled generating units* or *scheduled loads*, in the same *region*, for which the prices submitted in *dispatch bids* or *dispatch offers* for a particular *trading interval* result in identical prices at their *regional reference node*, then the MW quantities specified in the relevant *price bands* of those *dispatch bids* or *dispatch offers* must be *dispatched* on a pro-rata basis, where this can be achieved without imposing undue costs on any party, or violating other constraints.

3.8.17 Self-commitment

(a) *Slow start generating units* are *generating units* which are unable to *synchronise* and increase *generation* within 30 minutes of receiving an instruction from *AEMO*.

(b) *Slow start generating units* must *self-commit* to be eligible for *dispatch*.

(c) A *Generator* may only *self-commit* a *scheduled generating unit* in accordance with this clause.

(d) A *Scheduled Generator* or a *Semi-Scheduled Generator* has a right to *synchronise* its *scheduled generating unit* or *semi-scheduled generating unit* (as the case may be) to the *power system* and have *AEMO dispatch* that *generating unit* subject to the *dispatch* procedures set out in this rule 3.8.

(e) A *Scheduled Generator* must advise *AEMO* of its intention to *self-commit* and *synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more.

(f) Unless otherwise agreed with *AEMO*, the *Scheduled Generator* must advise of its intention under paragraph (e) through *PASA* and *pre-dispatch* by submitting an amended *available capacity* profile of the *scheduled generating unit* into the *market information bulletin board*.

(g) The exact time of *synchronisation* for a *scheduled generating unit* will be subject to directions from *AEMO* in accordance with Chapter 4.

(h) A *Scheduled Generator* or *Market Participant* must notify *AEMO* of any changes to *self-commitment* decisions without delay.

(i) *AEMO* must notify all *Scheduled Generators* and *Market Participants* of any changes to *self-commitment* decisions without delay.

3.8.18 Self-decommitment

(a) A *Generator* may only *self-decommit* a *scheduled generating unit* in accordance with this clause.

(b) *Scheduled Generators* must notify *AEMO* of their planned *self-decommitment* decisions in relation to *slow start generating units* at least 2 *days* in advance of *dispatch*.

(c) A *Scheduled Generator* must advise *AEMO* of its intention to *self-decommit* and *de-synchronise* a *generating unit* with a *nameplate rating* of 30 MW or more.

(d) Unless otherwise agreed with *AEMO*, the *Scheduled Generator* must advise of its intention under paragraph (c) through *PASA* and *pre-dispatch* by submitting an amended *available capacity* profile of the *scheduled generating unit* into the *market information bulletin board*.

(e) A *Scheduled Generator* or *Market Participant* must notify *AEMO* as soon as practicable of any changes in their *self-decommitment* decisions.

(f) *AEMO* must notify all *Scheduled Generators* and *Market Participants* of any changes to *self-decommitment* decisions as soon as practicable.

3.8.19 Dispatch inflexibilities

(a) Subject to clause 3.8.19(a2), if a *Scheduled Generator* or *Market Participant* reasonably expects one or more of its *scheduled generating units*, *scheduled network services* or *scheduled loads* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit*, *scheduled network service* or *scheduled load*, it must advise *AEMO* through the *PASA* process or in its *dispatch offer* or *dispatch bid* in respect of that *scheduled generating unit*, *scheduled network service* or *scheduled load*, as appropriate under this Chapter, that the *scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* in that *trading interval* and must specify a fixed *loading level* at which the *scheduled generating unit*, *scheduled network service* or *scheduled load* is to be operated in that *trading interval*.

(a1) Subject to clause 3.8.19(a2), if a *Semi-Scheduled Generator* reasonably expects one or more of its *semi-scheduled generating units* to be unable to operate in accordance with *dispatch instructions* in any *trading interval* due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *semi-scheduled generating unit*, it must advise *AEMO* in its *dispatch offer* in respect of that *semi-scheduled generating unit*, as appropriate under this Chapter, that the *semi-scheduled generating unit* is *inflexible* in that *trading interval* and must specify a maximum *loading level* at or below which the *semi-scheduled generating unit* is to be operated in that *trading interval*. Where the specified maximum *loading level* in these circumstances exceeds the *unconstrained intermittent generation forecast* for the *semi-scheduled generating unit*, the *dispatch level* for the *semi-scheduled generating unit* will nonetheless not exceed the *unconstrained intermittent generation forecast*.

(a2) If clause 3.8.19(a) or clause 3.8.19(a1) applies, the *Scheduled Generator*, *Market Participant* or *Semi-Scheduled Generator*:

(1) must not advise *AEMO* that a *scheduled generating unit, semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* under clause 3.8.19(a) or clause 3.8.19(a1) unless it reasonably expects the *scheduled generating unit*, *semi-scheduled generating unit, scheduled network service* or *scheduled load* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit, semi-scheduled generating unit, scheduled network service* or *scheduled load*; and

(2) must, as soon as practicable, advise *AEMO* that a *scheduled generating unit, semi-scheduled generating unit, scheduled network service* or *scheduled load* is not *inflexible* once it no longer reasonably expects the *scheduled generating unit, semi-scheduled generating unit, scheduled network service* or *scheduled load* to be unable to operate in accordance with *dispatch instructions* in any *trading interval*, due to abnormal *plant* conditions or other abnormal operating requirements in respect of that *scheduled generating unit, semi-scheduled generating unit, scheduled network service* or *scheduled load*.

(b) Where a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* advises *AEMO* that a *scheduled generating unit, semi-scheduled generating unit, scheduled network service* or *scheduled load* is *inflexible* in accordance with clause 3.8.19(a) or 3.8.19(a1) the *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* must:

(1) provide *AEMO* with a brief, verifiable and specific reason why the *scheduled generating unit, semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible* at the same time as it advises *AEMO* of the *inflexibility*; and

(2) provide to the *AER,* upon written request, in accordance with the guidelines issued by the *AER* from time to time in accordance with the *Rules consultation procedures* such additional information to substantiate and verify the reason for such *inflexibility* as the *AER* may require from time to time. The *AER* must provide information provided to it in accordance with this clause 3.8.19(b)(2) to any *Market Participant* that requests such information, except to the extent that the information can be reasonably claimed to be *confidential information*.

(c) Other than in *trading intervals* for which it has been specified by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* in the relevant *dispatch offer* or *dispatch bid* for a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* that the *scheduled generating unit, semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is *inflexible*, *AEMO* will *dispatch* the *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* in accordance with the prices and *price bands* specified in the relevant *dispatch offer* or *dispatch bid*.

(d) In respect of *scheduled loads, scheduled generating units* or *semi-scheduled generating units* which are not *slow start generating units*, *Scheduled*

Generators, *Semi-Scheduled Generators* and *Market Participants* may provide *AEMO*, as part of the *registered bid and offer data* in respect of those *scheduled loads* or *generating units* or *semi-scheduled generating units*, with a *dispatch inflexibility profile*.

(e) A *dispatch inflexibility* profile for a *generating unit* must contain the following parameters to indicate its MW capacity and time related *inflexibilities*:

(1) The time, T1, in minutes, following the issue of a *dispatch instruction* by *AEMO* to increase its loading from 0 MW, which is required for the *plant* to begin to vary its *dispatch* level from 0 MW in accordance with the instruction;

(2) The time, T2, in minutes, that the *plant* requires after T1 (as specified in subparagraph (1)) to reach a specified minimum MW *loading level*;

(3) The time, T3, in minutes, that the *plant* requires to be operated at or above its minimum *loading level* before it can be reduced below that level;

(4) The time, T4, in minutes, following the issue of a *dispatch instruction* by *AEMO* to reduce loading from the minimum *loading level* (specified under subparagraph (2)) to zero, that the *plant* requires to completely comply with that instruction;

(5) T1, T2, T3 and T4 must all be equal to or greater than zero;

(6) The sum (T1 + T2) must be less than or equal to 30 minutes; and

(7) The sum (T1 + T2 + T3 + T4) must be less than 60 minutes.

(f) A *dispatch inflexibility profile* for a *scheduled load* must contain parameters to indicate its MW capacity and time related *inflexibilities*.

(g) *AEMO* must use reasonable endeavours not to issue a *dispatch instruction* which is inconsistent with a *Scheduled Generator's*, *Semi-Scheduled Generator's* or *Market Participant's dispatch inflexibility profile*.

3.8.20 Pre-dispatch schedule

(a) Each *day*, in accordance with the *timetable*, *AEMO* must prepare and *publish* a *pre-dispatch schedule* covering each *trading interval* of the period commencing from the next *trading interval* after the current *trading interval* up to and including the final *trading interval* of the last *trading day* for which all valid *dispatch bids* and *dispatch offers* have been received in accordance with the *timetable* and applied by the *pre-dispatch* process.

(b) The *pre-dispatch* process is to have a resolution of one *trading interval* and no analysis will be made of operations within the *trading interval*, other than to ensure that *contingency capacity reserves* are adequate as set out in Chapter 4.

(c) *AEMO* must determine the *pre-dispatch schedule* for each *trading interval* on the basis of:

(1) *dispatch bids, dispatch offers* and *market ancillary service offers* submitted for that *trading interval*;

(2) *AEMO's* forecast *power system load* for each *region* for that *trading interval*; and

(3) the *unconstrained intermittent generation forecasts*,

and by using a process consistent with the principles for *central dispatch* as set out in clause 3.8.1.

(d) In determining the *pre-dispatch schedule AEMO* shall not take account of any *dispatch inflexibility profile* submitted in accordance with clause 3.8.19.

(e) Any inputs made to the *pre-dispatch* process by *AEMO* for the purpose of achieving a physically realisable schedule or to satisfy *power system security* requirements must be made prior to release of the *pre-dispatch schedule* and recorded by *AEMO* in a manner suitable for audit.

(f) The *pre-dispatch schedule* must include the details set out in clause 3.13.4(f).

(g) Each *Scheduled Generator*, *Scheduled Network Service Provider* and *Market Customer* which has classified a *scheduled load* and *Market Participant* (which has classified an *ancillary service generating unit* or *ancillary service load*) must ensure that it is able to *dispatch* its plant as required under the *pre-dispatch schedule* and is responsible for changing inputs to the *central dispatch* process, if necessary to achieve this, via the rebidding provisions under clause 3.8.22.

(h) The *pre-dispatch schedule* must be re-calculated and the results re-*published* by *AEMO* regularly in accordance with the *timetable*, or more often if a change in circumstances is deemed by *AEMO* to be likely to have a significant effect on the operation of the *market*.

(i) *AEMO* must fully document the operation of the *pre-dispatch* process, including the principles adopted in making calculations required to be included and all such documentation must be made available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* at a fee to be set by *AEMO* to cover its costs of supplying such documentation.

(j) The following *pre-dispatch* outputs relating specifically to a *generating unit*, *scheduled network service*, *scheduled load* or *ancillary service load* operated by a *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* (as the case may be) must be made available electronically to the relevant *Generator* or *Market Participant* on a confidential basis:

(1) the scheduled times of *commitment* and *de-commitment* of individual *slow start generating units*;

(2) scheduled half hourly *loading* for each scheduled entity;

(3) scheduled provision of *ancillary services*;

(4) scheduled *constraints* for the provision of *ancillary services*;

(5) scheduled *constraints* due to *network* limitations;

(6) *unconstrained intermittent generation forecasts* for each *trading interval*; and

(7) for each *semi-scheduled generating unit* and *trading interval*, whether or not a condition for setting a *semi-dispatch interval* applies.

(k) Where the *pre-dispatch schedule* may have failed to *dispatch* a *scheduled generating unit* or a *semi-scheduled generating unit* to maximise the joint value of *energy* and *ancillary services pre-dispatch* outputs of a *scheduled generating unit* or *semi-scheduled generating unit*, due to the *generating unit* operating outside its *enablement limit*, *AEMO* must notify the *Scheduled Generator* or *Semi-Scheduled Generator* operating the relevant *generating unit* electronically on a confidential basis.

3.8.21 On-line dispatch process

(a) *Dispatch bids* and *dispatch offers* must be *centrally dispatched* by *AEMO* using the *dispatch algorithm*.

(a1) A *dispatch interval* is to be five minutes in duration.

(b) The *dispatch algorithm* is to be run by *AEMO* for each *dispatch interval*. If the *dispatch algorithm* is not successfully run for any *dispatch interval* then the values of the last successful run of the *dispatch algorithm* must be used for that *dispatch interval*.

(c) *Central dispatch* results in the setting of *dispatch prices* and *ancillary services prices* for each *dispatch interval* and *spot prices* for each *trading interval* in accordance with rule 3.9.

(d) Where possible, *dispatch instructions* will be issued electronically via the *automatic generation control system* or via an electronic display in the *plant* control room (which may be onsite or offsite) of the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* (as the case may be).

(e) *AEMO* may issue *dispatch instructions* in some other form if in its reasonable opinion the methods described in paragraph (d) are not possible.

(f) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must ensure it has facilities to receive *dispatch instructions* in the manner described in this clause 3.8.21.

(g) *Dispatch instructions* that are issued via the *automatic generation control system* are to be issued progressively at intervals of no more than 5 minutes following re-evaluation of *central dispatch* to achieve a prompt and smooth implementation of the outcomes of each *central dispatch* update.

(h) With the exception of instructions issued by telephone, all *dispatch instructions* and the times at which they are issued are to be logged automatically and *dispatch instructions* that are issued by telephone must be recorded by *AEMO*.

(i) *AEMO* may modify or override the *dispatch algorithm* outcome in accordance with the requirements of clause 4.8.9 or due to *plant* not conforming to *dispatch instructions* and in such circumstances *AEMO* must record the details of the event and the reasons for its action for audit purposes.

(j) If a *scheduled load*, *scheduled generating unit* or *semi-scheduled generating unit,* in respect of which a *dispatch inflexibility profile* has been notified to *AEMO* in accordance with clause 3.8.19, is *dispatched* from 0 MW in any *dispatch interval* by the *central dispatch* process, then the specified *dispatch inflexibility profile* must be used by *AEMO* as a *constraint* on the *dispatch* of that *plant* for the relevant subsequent *dispatch intervals*.

(k) A *scheduled load* or *generating unit* whose *dispatch* is *constrained* in any *dispatch interval* due to a *dispatch inflexibility profile* submitted under clause 3.8.19 cannot be used as the basis for setting the *dispatch price* in that *dispatch interval* at any location.

(l) *AEMO* must fully document the operation of the process described in this clause 3.8.21, including the software, algorithms, and the principles adopted in making judgments where they are required in the process and all such documentation must be made available to *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* at a price reflective of costs incurred by *AEMO* in providing such documentation.

(m) Where the *central dispatch* process may have failed to *dispatch* a *scheduled generating unit* or *semi-scheduled generating unit* to maximise the joint value of *energy* and *ancillary services* due to the relevant *generating unit* operating outside its *enablement limit*, *AEMO* must notify the *Scheduled Generator* or *Semi-Scheduled Generator* operating the relevant *generating unit* electronically on a confidential basis.

3.8.22 Rebidding

(a) Prices for each *price band* that are specified in *dispatch bids, dispatch offers* and *market ancillary service offers* are firm and no changes to the price for any *price band* are to be accepted under any circumstances.

(b) Subject to paragraph (c) and clauses 3.8.3A, 3.8.7A, 3.8.19(a) and 3.8.22A, a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may vary:

(1) its *available capacity*, daily *energy constraints*, *dispatch inflexibilities* and *ramp rates* of *generating units*, *scheduled network services* and *scheduled loads*; and

(2) the *response breakpoints*, *enablement limits* and response limits of *market ancillary services*.

(c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must provide:

(1) all *rebids* to *AEMO* electronically unless otherwise approved by *AEMO;*

(2) to *AEMO*, at the same time as the *rebid* is made:

(i) a brief, verifiable and specific reason for the *rebid;* and

(ii) the time at which the event(s) or other occurrence(s) adduced by the relevant *Generator* or *Market Participant* as the reason for the *rebid*, occurred; and

(3) to the *AER,* upon written request, in accordance with guidelines published by the *AER* from time to time under this clause 3.8.22 and in accordance with the *Rules consultation procedures*, such additional information to substantiate and verify the reason for a *rebid* as the *AER* may require from time to time.

(d) The *AER* must provide information provided to it in accordance with paragraph (c)(3) to any *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* that requests such information, except to the extent that the information can be reasonably claimed to be *confidential information*.

(e) The guidelines developed by the *AER* under paragraph (c)(3) must include:

(1) the amount of detail to be included in the information provided to *AEMO* under paragraph (c)(2); and

(2) procedures for handling claims by *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* in accordance with paragraph (d) or clause 3.8.19(b)(2) that the information provided to the *AER* by such *Generators* or *Market Participants* under those clauses is *confidential information.*

(f) The *AER* must *publish* the guidelines developed under this clause 3.8.22 and may amend such guidelines from time to time.

(g) *AEMO* must:

(1) subject to the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* complying with paragraphs (c)(1) and (c)(2)(i) and (ii), accept the *rebid;* and

(2) *publish,* in accordance with clause 3.13.4(p), the time the *rebid* was made and the reason provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* under paragraph (c)(2)(i).

3.8.22A Variation of offer, bid or rebid

(a) A *Scheduled Generator, Semi-Scheduled Generator* or *Market Participant* must make a *dispatch offer, dispatch bid* or *rebid* in relation to *available capacity* and daily *energy constraints* in good faith.

(b) In paragraph (a) a *dispatch offer*, *dispatch bid* or *rebid* is taken to be made in good faith if, at the time of making such an offer, bid or *rebid*, a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* has a genuine intention to honour that offer, bid or *rebid* if the material conditions and circumstances upon which the offer, bid or *rebid* were based remain unchanged until the relevant *dispatch interval*.

(c) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may be taken to have contravened paragraph (a) notwithstanding that, after all the evidence has been considered, the intention of the relevant *Generator* or *Market Participant* is ascertainable only by inference from:

(1) the conduct of the relevant *Generator* or *Market Participant*;

(2) the conduct of any other person; or

(3) the relevant circumstances.

3.8.23 Failure to conform to dispatch instructions

(a) If a *scheduled generating unit*, *scheduled network service* or *scheduled load* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in *AEMO's* reasonable opinion), then the *scheduled generating unit*, *scheduled network service* or *scheduled load* (as the case may be):

(1) is to be declared and identified as non-conforming; and

(2) cannot be used as the basis for setting *spot prices*.

(b) If a *semi-scheduled generating unit* fails to respond to a *dispatch instruction* within a tolerable time and accuracy (as determined in *AEMO's* reasonable opinion) in a *semi-dispatch interval* where the unit's actual *generation* is more than the *dispatch level*, the unit is to be declared and identified as non-conforming and cannot be used as the basis for setting *spot prices*.

(c) If a *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* or *scheduled load* is identified as non-conforming under paragraphs (a) or (b):

(1) *AEMO* must advise the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* that the relevant *generating unit*, *scheduled network service* or *scheduled load* is identified as non-conforming, and request and log a reason for the non-compliance with the *dispatch instruction*;

(2) if in *AEMO's* opinion modification of *plant* parameters is necessary or desirable, *AEMO* must request the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* to submit modified *plant* parameters to satisfy *AEMO* that a realistic real time *dispatch* schedule can be carried out;

(3) should a *Scheduled Generator* or *Semi-Scheduled Generator* fail to meet the requests set out subparagraphs (1) and (2) or if *AEMO* is not satisfied

that the *generating unit* will respond to future *dispatch instructions* as required, *AEMO* must direct the *generating unit's* output to follow, as far as is practicable, a specified output profile to be determined at its discretion by *AEMO*;

(4) should a *Scheduled Network Service Provider* fail to meet the requests set out in subparagraphs (1) and (2) or if *AEMO* is not satisfied that the *scheduled network service* will respond to future *dispatch instructions* as required, *AEMO* must direct the *scheduled network service* to follow, as far as is practicable, a specified transfer profile to be determined at its discretion by *AEMO*; and

(5) should a *Market Customer* not meet the requests set out in subparagraphs (1) and (2) within a reasonable time of the request, or if *AEMO* is not satisfied that the *scheduled load* will respond to future *dispatch instructions* as required, *AEMO* acting reasonably may invoke a *default dispatch bid* lodged by the relevant *Market Customer* or apply *constraints* as it deems appropriate.

(d) Until a *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* satisfactorily responds to the requests under paragraphs (c)(1) and (2) and *AEMO* is satisfied that the *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) will respond to future *dispatch instructions* as required, the *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) continues to be non-conforming.

(e) If a *generating unit*, *scheduled network service* or *scheduled load* (as the case may be) continues to be non-conforming under this clause 3.8.23 after a reasonable period of time, *AEMO* must prepare a report setting out the details of the non-conformance and forward a copy of the report to the *Scheduled Generator*, *Semi-Scheduled Generator*, *Scheduled Network Service Provider* or *Market Customer* (as the case may be) and the *AER*.

(f) The direction referred to in paragraphs (c)(3) and (4) must remain in place until the *Scheduled Generator*, *Semi-Scheduled Generator* or *Scheduled Network Service Provider* (whichever is relevant) satisfies *AEMO* of rectification of the cause of the non-conformance.

(g) If an *ancillary service generating unit* or *ancillary service load* is *enabled* to provide a *market ancillary service* and fails to respond in the manner contemplated by the *market ancillary service specification* (as determined in *AEMO's* reasonable opinion), then:

(1) the *ancillary service generating unit* or *ancillary service load* is to be declared and identified as non-conforming;

(2) *AEMO* must advise the relevant *Market Participant* that the *ancillary service generating unit* or *ancillary service load* is identified as non-conforming, and request a reason for the non-conformance. The relevant *Market Participant* must promptly provide a reason if requested to do so, and the reason is to be logged; and

(3) *AEMO* may set a fixed level for the relevant *ancillary service* (in this clause 3.8.23 called the 'fixed constraint') for the *ancillary service generating unit* or *ancillary service load* and the relevant *Market Participant* must ensure that the *ancillary service generating unit* or *ancillary service load* complies with the fixed constraint set by *AEMO*.

(h) *AEMO* must lift the fixed constraint in respect of an *ancillary service generating unit* or *ancillary service load* when *AEMO* is reasonably satisfied (as a result of a test or otherwise) that the *ancillary service generating unit* or *ancillary service load* is capable of responding in the manner contemplated by the *market ancillary service specification*.

(i) In assessing a report of non-conformance with a *dispatch instruction* by a *scheduled load,* the *AER* shall have regard to whether a *default dispatch bid* had been lodged with *AEMO* and was, or could have reasonably been, applied in the circumstances applicable to that *scheduled load*.

3.8.24 Scheduling errors

(a) A *scheduling error* is any one of the following circumstances:

(1) the *dispute resolution panel* determines under rule 8.2 that *AEMO* has failed to follow the *central dispatch* process set out in this rule 3.8; or

(2) *AEMO* declares that it failed to follow the *central dispatch* process set out in this rule 3.8; or

(3) *AEMO* determines under clause 3.9.2B(d) that a *dispatch interval* contained a manifestly incorrect input.

(b) *Spot prices* and *market ancillary service* prices will not be adjusted due to the occurrence of a *scheduling error* except where the *scheduling error* arises through the application of clause 3.9.2B.

3.9 Price Determination

3.9.1 Principles applicable to spot price determination

(a) The principles applying to the determination of prices in the *spot market* are as follows:

(1) a *dispatch price* at a *regional reference node* is determined by the *central dispatch* process for each *dispatch interval*;

(2) a *spot price* at a *regional reference node* is the time-weighted average of the *dispatch prices* at that *regional reference node* in a *trading interval*;

(2A) the *central dispatch* process must determine an *ancillary service price* for each *market ancillary service* at each *regional reference node* for every *dispatch interval*;

(3) *dispatch prices* determine *dispatch* such that a *generating unit* or *load* whose *dispatch bid* or *dispatch offer* at a location is below the *spot price* at that location will normally be *dispatched*;

(3A) *generating units*, *scheduled network services* or *scheduled loads* which operate in accordance with a *direction*, are to be taken into account in the *central dispatch* process, but the *dispatch offer*, in the case of a *generating unit* or *scheduled network service*, which operates in accordance with a *direction*, or the *dispatch bid*, in the case of a *scheduled load* which operates in accordance with a *direction*, will not be used in the calculation of the *dispatch price* in the relevant *dispatch interval*;

(3B) *ancillary service generating units* and *ancillary service loads* the subject of a fixed constraint (within the meaning of clause 3.8.23(g)) are to be taken into account in the *central dispatch* process, but the price in a *market ancillary service offer* which operates in accordance with a fixed constraint will not be used in the calculation of the *ancillary service price* for that *market ancillary service* in the relevant *dispatch interval*;

(3C) *generating units* or *loads* which operate in accordance with a *direction* to provide an *ancillary service* are to be taken into account in the *central dispatch* process, but the price in a *market ancillary service offer* which operates in accordance with a *direction*, will not be used in the calculation of the *ancillary service price* for that *market ancillary service* in the relevant *dispatch interval*;

(4) *network losses*, *network constraints*, the availability of *scheduled network services* and *network dispatch offers* are taken into account in the determination of *dispatch* and consequently affect *dispatch prices*, *spot prices* and (apart from *network losses*) *ancillary services prices*;

(5) where the *energy* output of a *Registered Participant* is limited above or below the level at which it would otherwise have been *dispatched* by *AEMO* on the basis of its *dispatch offer* or *dispatch bid* due to an *ancillary services direction*, the *Registered Participant's dispatch offer* or *dispatch bid* is taken into account in the determination of *dispatch* but the *dispatch offer* or *dispatch bid* will not be used in the calculation of the *dispatch price* for *energy* in the relevant *dispatch interval*;

(5A) *market ancillary service offers*, in other *ancillary services markets*, due to an *ancillary services direction* are taken into account in the determination of *dispatch* and consequently affect *ancillary service prices* in those other *ancillary services markets*;

(6) when the *spot price* is determined, it applies to both sales and purchases of electricity at a particular location and time;

(6A) when an *ancillary service price* is determined for an *ancillary service*, it applies to purchases of that *ancillary service*;

(6B) when an *ancillary service price* is determined under paragraph (6A) for a *regulation service*, it applies to purchases of that *regulation service* and, where appropriate, purchases of a *delayed service*;

(7) *spot prices* and *dispatch prices* provide *Market Participants* with signals as to the value of providing or cost of consuming electricity at a particular location at a particular time; and

(7A) *ancillary service prices* provide *Ancillary Service Providers* with signals as to the value of providing the relevant *market ancillary service* within a particular *region* at a particular time.

(b) A single *regional reference price* which is the *spot price* at the *regional reference node* provides a reference from which the *spot prices* are determined within each *region*.

(c) The *local spot price* at each *transmission network connection point* is the *spot price* at the *regional reference node* for the *region* to which the *connection point* is assigned multiplied by the *intra-regional loss factor* applicable to that *connection point*.

3.9.2 Determination of spot prices

(a) **[Deleted]**

(b) **[Deleted]**

(c) Each time the *dispatch algorithm* is run by *AEMO*, it must determine a *dispatch price* for each *regional reference node* for a *dispatch interval* in accordance with clause 3.8.21(b), provided that if *AEMO* fails to run the *dispatch algorithm* to determine *dispatch prices* for any *dispatch interval* then the *dispatch price* for that *dispatch interval* is the last *dispatch price* determined by the *dispatch algorithm* prior to the relevant *dispatch interval*.

(d) The *dispatch price* at a *regional reference node* represents the marginal value of *supply* at that location and time, this being determined as the price of meeting an incremental change in *load* at that location and time in accordance with clause 3.8.1(b).

(e) Notwithstanding clauses 3.9.2(c) or (d), for any *dispatch interval* if:

(1) the *dispatch price* for that *dispatch interval* has not already been set by the *central dispatch* process and *AEMO* reasonably determines that the *central dispatch* process may determine that all *load* in a *region* could not otherwise be supplied and *AEMO* issues instructions that are current for that *dispatch interval* to *Network Service Providers* or *Market Participants* to shed *load*, then *AEMO* must set the *dispatch price* at that *region's regional reference node* to equal the *market price cap*;

(2) *AEMO* has declared a *dispatch interval* to be an *intervention price dispatch interval* under clause 3.9.3(a), then subject to clauses 3.9.3(c) and 3.9.3(d) *AEMO* must set the *dispatch price* in accordance with clause 3.9.3; and

(3) **[Deleted]**

(4) an *administered price period* in accordance with rule 3.14 applies, then *AEMO* must limit the *dispatch price* in accordance with clause 3.14.2(d1).

(f) **[Deleted]**

(g) **[Deleted]**

(h) The *spot price* at a *regional reference node* for a *trading interval* equals the time weighted average of the *dispatch prices* at the *regional reference node* for each of the *dispatch intervals* in the *trading interval*, provided that if *AEMO* has made a declaration that the *market* is suspended under clause 3.14.3, then the *spot price* in any *trading interval* during the period during which the *spot market* is suspended must be determined in accordance with clause 3.14.5.

(i) **[Deleted]**

(j) **[Deleted]**

(k) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 and for the purpose of conducting that test, the *generating unit* or *scheduled load* is excluded from *central dispatch*, then that *generating unit* or *scheduled load* cannot be used to set the *dispatch price* for *energy* in the relevant *dispatch interval*.

3.9.2A Determination of ancillary services prices

(a) Each time the *dispatch algorithm* is run by *AEMO*, it must determine an *ancillary service price* for each *market ancillary service* for each *regional reference node* which is to apply until the next time the *dispatch algorithm* is run, provided that if *AEMO* fails to run the *dispatch algorithm* to determine *ancillary service prices* for any *dispatch interval* then the *ancillary service price* for that *dispatch interval* is the last *ancillary service price* determined by the *dispatch algorithm* prior to the relevant *dispatch interval*.

(b) For each *market ancillary service*, including the *regulating raise service* and the *regulating lower service*, each time the *dispatch algorithm* is run by *AEMO* where a local *ancillary services* constraint has been applied, *AEMO* must:

(1) calculate the marginal price of meeting any *global market ancillary service requirement* for that service;

(2) calculate the marginal price of meeting each *local market ancillary service requirement* for that service and;

(3) identify for each *local market ancillary service requirement* the *regions* requiring the service.

(b1) An *ancillary service price* for a *region* is the sum of:

(1) the marginal price of meeting any *global market ancillary service requirement* for that service; and

(2) the marginal price of meeting each *local market ancillary service requirement* for that service in that *region*.

(c) If an *ancillary service price* determined using the *dispatch algorithm* under clause 3.9.2A(a):

(1) is less than zero, then the *ancillary service price* is reset to zero; and

(2) is greater than the *market price cap*, then the *ancillary service price* is reset to the *market price cap*.

(c1) If a marginal price calculated pursuant to clause 3.9.2A(b) is greater than the *market price cap*, then that marginal price is reset to the *market price cap.*

(d) If a test is being conducted on a *generating unit* or *scheduled load* in accordance with clause 3.11.7 and for the purpose of conducting that test, the *generating unit* or *scheduled load* is excluded from *central dispatch*, then that *generating unit* or *scheduled load* cannot be used to set *market ancillary service prices*.

3.9.2B Pricing where AEMO determines a manifestly incorrect input

(a) For the purposes of this clause:

"Input" means any value that is used by the *dispatch algorithm* including measurements of *power system* status, five minute demand forecast values, *constraint* equations entered by *AEMO*, or software setup but not including *dispatch bids* and *dispatch offers* submitted by *Registered Participants*.

"Last correct *dispatch interval*" means the most recent *dispatch interval* preceding the affected *dispatch interval* that is not itself an affected *dispatch interval*.

(b) *AEMO* may apply the automated procedures developed in accordance with clause 3.9.2B(h), to identify a *dispatch interval* as subject to review ("a *dispatch interval* subject to review").

(c) *AEMO* may also determine that a *dispatch interval* is subject to review if *AEMO* considers that it is likely to be subject to a manifestly incorrect input, but only where the *dispatch interval* immediately preceding it was a *dispatch interval* subject to review.

(d) *AEMO* must determine whether a *dispatch interval* subject to review contained a manifestly incorrect input to the *dispatch algorithm* ("an affected *dispatch interval*").

(e) Where *AEMO* determines an affected *dispatch interval*, *AEMO* must:

(1) replace all *dispatch prices* and *market ancillary services* prices with the corresponding prices for the last correct *dispatch interval*; and

(2) recalculate, in accordance with clause 3.9.2(h), and adjust all *spot prices* relevant to each affected *dispatch interval*.

(f) *AEMO* may only carry out the action described in clause 3.9.2B(e) if no more than 30 minutes have elapsed since the publication of the *dispatch prices* for the *dispatch interval* subject to review.

(g) As soon as reasonably practicable after the action as described in clause 3.9.2B(e), *AEMO* must *publish* a report outlining:

(1) The reasons for the determination under clause 3.9.2B(d);

(2) Whether that determination was correct;

(3) What action will be taken to minimise the risk of a similar event in future.

(h) *AEMO* must, in consultation with *Registered Participants*, develop procedures for the automatic identification of *dispatch intervals* subject to review under clause 3.9.2B (b) (the "automated procedures").

(i) The purpose of the automated procedures is to detect instances where manifestly incorrect inputs may have resulted in material differences in pricing outcomes.

(j) [**Deleted**]

(k) At least once each calendar year, *AEMO* must review the effectiveness of the automated procedures referred to in clause 3.9.2B(h).

(l) *AEMO* must report on the findings of the review under clause 3.9.2B(k) and must include in that report details of all *dispatch intervals* subject to review that were not affected *dispatch intervals* and an analysis of why such intervals were identified as subject to review.

(m) [**Deleted**]

3.9.3 Pricing in the event of intervention by AEMO

(a) In respect of a *dispatch interval* where a *AEMO intervention event* occurs *AEMO* must declare that *dispatch interval* to be an *intervention price dispatch interval*.

(b) Subject to paragraphs (c) and (d), *AEMO* must in accordance with the methodology or assumptions *published* pursuant to paragraph (e) set the *dispatch price* and *ancillary service prices* for an *intervention price dispatch interval* at the value which *AEMO*, in its reasonable opinion, considers would have applied as the *dispatch price* and *ancillary service price* for that *dispatch interval* in the relevant *region* had the *AEMO intervention event* not occurred.

(c) *AEMO* may continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A until the later of:

(1) the second *dispatch interval* after the first *dispatch interval* in which the *AEMO intervention event* occurred; or

(2) if applicable, the second *dispatch interval* after the restoration of the *power system* to a *secure operating state* after any *direction* which constitutes the *AEMO intervention event* was issued,

provided that *AEMO* must use its reasonable endeavours to set *dispatch prices* and *ancillary service prices* pursuant to this clause 3.9.3 as soon as practicable following the *AEMO intervention event*.

(d) *AEMO* must continue to set *dispatch prices* pursuant to clause 3.9.2 and *ancillary service prices* pursuant to clause 3.9.2A if a *direction* given to a *Registered Participant* in respect of *plant* at the *regional reference node* would not in *AEMO's* reasonable opinion have avoided the need for any *direction* which constitutes the *AEMO intervention event* to be issued.

(e) Subject to paragraph (g), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use, and any assumptions it may be required to make, to determine *dispatch prices* and *ancillary service prices* for the purposes of paragraph (b).

(f) The methodology developed by *AEMO* under paragraph (e) must wherever reasonably practicable:

(1) be consistent with the principles for *spot price* determination set out in clause 3.9.l;

(2) enable *AEMO* to determine and *publish* such prices in accordance with clause 3.13.4; and

(3) be consistent with the principles for *ancillary service price* determination set out in clauses 3.9.2 and 3.9.2A.

(g) *AEMO* may make minor and administrative amendments to the methodology developed under paragraph (e) without complying with the *Rules consultation procedures*.

3.9.3A Reliability standard and reliability settings review

(a) By 30 April of each second year (commencing 2010) the *Reliability Panel* must conduct a review in accordance with the *Rules consultation procedures* on the *reliability standard* and *reliability* settings set out in paragraph (b) of this clause and *publish* a report on the *reliability standard* and *reliability* settings that it recommends should apply from 1 July in the year commencing 2 years after the year in which the review is conducted.

(b) In conducting a review in accordance with this clause 3.9.3A, the *Reliability Panel* must review the following:

(1) the *reliability standard*;

(2) the *market price cap*;

(3) the *cumulative price threshold*; and

(4) the *market floor price*.

3.9.4 Market Price Cap

(a) The *market price cap* is a price cap which is to be applied to *dispatch prices*.

(b) The value of the *market price cap* is $10,000/MWh prior to 1 July 2010. Effective from 1 July 2010, the value of the *market price cap* is $12,500/MWh.

(c) In conducting a review of the *market price cap* in accordance with clause 3.9.3A, the *Reliability Panel* must have regard to the potential impact of any proposed increase in the *market price cap* on:

(1) *spot prices*;

(2) investment in the *National Electricity Market*; and

(3) the *reliability* of the *power system*.

(c1) The *market price cap* recommended by the *Reliability Panel* in a review under clause 3.9.3A must be a level which the *Reliability Panel* considers will:

(1) allow the *reliability standard* to be satisfied without use of *AEMO's* powers to intervene under clauses 3.20.7(a) and 4.8.9(a);

(2) in conjunction with other provisions of the *Rules*, not create risks which threaten the overall integrity of the *market*; and

(3) take into account any other matters the *Reliability Panel* considers relevant.

(c2) A report of the *Reliability Panel* under clause 3.9.3A must set out the conclusions of its review and the recommendation in relation to the level of the *market price cap* along with supporting information including:

(1) details of all relevant *market* conditions and circumstances on which the recommendation is based; and

(2) an assessment of whether the level of the *market price cap* together with the operation of the *cumulative price threshold* has achieved the objectives set out in clauses 3.9.4(c1)(1) and (2).

(d) In its review of the *market price cap* under clause 3.9.3A, the *Reliability Panel* may only recommend a change to the *market price cap* from 1 July in the year commencing 2 years after the year in which the review is being conducted where:

(1) in the *Reliability Panel's* opinion, it is highly probable that the relevant *market* conditions and circumstances on which the recommendation for that year are based as stated in the report of the *Reliability Panel* under clause 3.9.3A will eventuate; and

(2) the *Reliability Panel* has given due consideration to the impact of the change to the *market price cap* on *Market Participants* and, in the event of a recommended decrease in the *market price cap*, any alternative arrangements considered necessary to ensure that the *reliability standard* is maintained.

3.9.5 Application of the Market Price Cap

(a) *Dispatch prices* at *regional reference nodes* must not exceed the *market price cap*.

(b) If *central dispatch* and determination of *dispatch prices* in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a *dispatch price* greater than the *market price cap* at any *regional reference node*, then subject to clause 3.9.5(c), the *dispatch price* at that *regional reference node* must be set to the *market price cap*.

(c) If the *dispatch price* at any *regional reference node* is set to the *market price cap* under clause 3.9.2 or clause 3.9.5 then *dispatch prices* at all other *regional reference nodes* connected by a *regulated interconnector* or *regulated interconnectors* that have an *energy* flow towards that *regional reference node* must not exceed the product of the *market price cap* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *market price cap* determined in accordance with clause 3.9.5(d).

(d) *AEMO* must determine the average *loss factors* applicable to clause 3.9.5(c) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.9.6 Market Floor Price

(a) The *market floor price* is a price floor which is to be applied to *dispatch prices*.

(b) The value of the *market floor price* is $-1,000/MWh.

(c) **[Deleted]**

(d) The *market floor price* recommended by the *Reliability Panel* in a review under clause 3.9.3A must be a level which the *Reliability Panel* considers will:

(1) allow the *market* to clear in most circumstances;

(2) not create substantial risks which threaten the overall stability and integrity of the *market*; and

(3) take into account any other matters the *Reliability Panel* considers relevant.

(e) A report of the *Reliability Panel* under clause 3.9.3A must set out the conclusions of its review and the recommendation in relation to the level of the *market floor price* along with supporting information including details of all

relevant *market* conditions and circumstances on which the recommendation is based.

3.9.6A Application of the Market Floor Price

(a) *Dispatch prices* at *regional reference nodes* must not be less than the *market floor price*.

(b) If *central dispatch* and determination of *dispatch prices* in accordance with rule 3.8, and clauses 3.9.2 and 3.9.3 would otherwise result in a *dispatch price* less than the *market floor price* at any *regional reference node*, then subject to clause 3.9.6A(c), the *dispatch price* at that *regional reference node* must be set to the *market floor price*.

(c) If the *dispatch price* at any *regional reference node* is set to the *market floor price* under clause 3.9.6A then *dispatch prices* at all other *regional reference nodes* connected by a *regulated interconnector* or *regulated interconnectors* that have an *energy* flow towards that *regional reference node* must be equal to or greater than the product of *market floor price* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *market floor price* in accordance with clause 3.9.6A.

(d) *AEMO* must determine the average *loss factors* applicable to clause 3.9.6A(c) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.9.7 Pricing for constrained-on scheduled generating units

(a) In the event that an *intra-regional network constraint* causes a *scheduled generating unit* to be *constrained-on* in any *dispatch interval*, that *scheduled generating unit* must comply with *dispatch instructions* from *AEMO* in accordance with its availability as specified in its *dispatch offer* but may not be taken into account in the determination of the *dispatch price* in that *dispatch interval*.

(b) A *Scheduled Generator* that is *constrained-on* in accordance with clause 3.9.7(a) is not entitled to receive from *AEMO* any compensation due to its *dispatch price* being less than its *dispatch offer price*.

3.10 [Deleted]

3.11 Ancillary Services

3.11.1 Introduction

(a) *Ancillary services* are services that are essential to the management of *power system security*, facilitate orderly trading in electricity and ensure that electricity supplies are of acceptable quality.

(b) *Market ancillary services* are *ancillary services* which are acquired by *AEMO* as part of the *spot market* in accordance with this Chapter 3. The prices for *market ancillary services* are determined using the *dispatch algorithm*.

(c) *Non-market ancillary services* are *ancillary services* which are not acquired by *AEMO* as part of the *spot market*, but under agreements which are entered into following a call for offers in accordance with this rule 3.11. The prices for *non-market ancillary services* are determined in accordance with the relevant *ancillary services agreements*.

3.11.2 Market ancillary services

(a) The *market ancillary services* are:

(1) the *fast raise service*;

(2) the *fast lower service*;

(3) the *slow raise service*;

(4) the *slow lower service*;

(5) the *regulating raise service*;

(6) the *regulating lower service*;

(7) the *delayed raise service*; and

(8) the *delayed lower service*.

(b) *AEMO* must make and *publish* a *market ancillary service specification* containing:

(1) a detailed description of each kind of *market ancillary service*; and

(2) the performance parameters and requirements which must be satisfied in order for a service to qualify as the relevant *market ancillary service* and also when a *Market Participant* provides the relevant kind of *market ancillary service*.

(c) *AEMO* may amend the *market ancillary service specification*, from time to time.

(d) *AEMO* must comply with the *Rules consultation procedures* when making or amending the *market ancillary service specification*.

(e) An amendment to the *market ancillary service specification* must not take effect until at least 30 days after the amendment has been *published*.

3.11.3 Acquisition of non-market ancillary services

(a) *AEMO* must use reasonable endeavours to acquire *non-market ancillary services* in accordance with the remaining relevant provisions of rule 3.11.

(b) The requirement for *AEMO* to acquire *non-market ancillary services* referred to in clause 3.11.3(a) must be met in the following ways:

(1) by *AEMO* setting minimum standards which are to be dealt with in *Registered Participants' connection agreements* for the technical performance of the service; or

(2) by *AEMO* acquiring *ancillary services* in accordance with this rule 3.11 or giving a *direction* in accordance with clause 4.8.9.

(c) *AEMO* must make and *publish* a set of *minimum technical ancillary service standards* that must be met by all *Registered Participants* who have entered into a *connection agreement*.

(d) *AEMO* may amend the *minimum technical ancillary service* standards from time to time.

(e) *AEMO* must comply with the *Rules consultation procedures* when making or amending the *minimum technical ancillary service standards*.

(f) In setting or amending *minimum technical ancillary service standards*, *AEMO* must:

(1) take into account the provisions of *connection agreements* existing at the time of setting or amending such standards;

(2) ensure that proposed *minimum technical ancillary service standards* do not impose more onerous material obligations on parties to existing *connection agreements*, as a whole, than are imposed by such existing *connection agreements*;

(3) take into account and minimise the additional costs overall that may arise from proposed *minimum technical ancillary service standards* for parties to existing *connection agreements* generally; and

(4) take into account the obligations imposed on parties to *connection agreements* by Chapter 5 of the *Rules* and any applicable *derogation*.

(g) The *minimum technical ancillary service standards* are not intended to, nor are to be read or construed as having the effect of:

(1) altering any term of a *connection agreement*;

(2) altering the contractual rights or obligations of any of the parties under a *connection agreement* as between those parties; or

(3) relieving the parties under any such *connection agreement* of their contractual obligations under such agreement or obligations under Chapter 5 of the *Rules*.

(h) An amendment to the *minimum technical ancillary service standards* must not take effect until at least 30 days after the *publication* of the report required under the *Rules consultation procedures*.

(i) *AEMO* is not responsible for payment to a *Registered Participant* for services provided by that *Registered Participant* under a *connection agreement* or under clause 4.9.2(b).

(j) A *Network Service Provider* must advise *AEMO* of all *ancillary services* or similar services to be provided by a *Registered Participant* under a *connection agreement* to which that *Network Service Provider* is a party.

(k) *AEMO* may instruct a *Registered Participant* to provide a *non-market ancillary service* agreed to be provided under a *connection agreement* and any *Registered Participant* so instructed must use reasonable endeavours to comply with any such instruction.

3.11.4 Procedure for determining quantities of network control ancillary services

(a) *AEMO* must develop and *publish* a detailed description of each *network control ancillary service*.

(b) *AEMO* must develop and *publish* a procedure for determining the quantities of each kind of *network control ancillary service* required for *AEMO*:

(1) to achieve the *power system security and reliability standards*; and

(2) where practicable to enhance *network* transfer capability whilst still maintaining a *secure operating state* when, in *AEMO's* reasonable opinion, the resultant expected increase in *network control ancillary service* costs will not exceed the resultant expected increase in benefits of trade from the *spot market*.

(c) *AEMO* may amend the description developed under clause 3.11.4(a) and the procedure referred to in clause 3.11.4(b).

(d) *AEMO* must comply with the *Rules consultation procedures* when making or amending descriptions or procedures under clause 3.11.4.

3.11.4A Guidelines and objectives for acquisition of system restart ancillary services

(a) The objective for *system restart ancillary services* is to minimise the expected economic costs to the *market* in the long term and in the short term, of a *major supply disruption*, taking into account the cost of supplying *system restart ancillary services*, consistent with the *national electricity objective* (the **SRAS objective**).

(b) *AEMO* must use reasonable endeavours to acquire *system restart ancillary services* in accordance with the relevant provisions of clause 3.11.4A.

(c) Each of the guidelines and *SRAS* description which *AEMO* is required to develop and *publish* in accordance with clause 3.11.4A must be:

(1) consistent with the *SRAS* objective;

(2) designed to ensure the *system restart standard* is met; and

(3) designed to ensure that the need for *system restart ancillary services* in each *electrical sub-network* is met, to the extent that it is practicable and reasonable to do so, by *AEMO* entering into *ancillary services agreements* for the provision of *primary restart services*.

(referred to collectively as the ***SRAS* procurement objectives**).

(d) *AEMO* must develop and *publish* a detailed description of each type of *system restart ancillary service* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(4), which description must identify:

(1) whether the *system restart ancillary service* is a *primary restart service* or a *secondary restart service*;

(2) the technical and availability requirements of each type of *system restart ancillary service*; and

(3) any other matter considered relevant by *AEMO*,

(the ***SRAS* description**).

(e) In order to demonstrate that there is a reasonable degree of certainty that a *facility* is capable of delivering the relevant *system restart ancillary service* if required to do so, *AEMO* must develop and *publish* guidelines for undertaking:

(1) modelling and assessment of the technical capabilities of *system restart ancillary services* proposed to be submitted as part of a *SRAS* expression of interest or in response to a NMAS invitation to tender;

(2) physical testing of *system restart ancillary services* as required by the *NMAS* tender guidelines under clause 3.11.5(b)(2); and

(3) any other analysis which *AEMO* considers appropriate,

(the ***SRAS* assessment guidelines**).

(f) *AEMO* must develop and *publish* the procedure for determining the number, type and location of *system restart ancillary services* required to be procured for each *electrical sub-network* consistent with the *system restart standard* determined by the *Reliability Panel* (the ***SRAS* quantity guidelines**).

(g) *AEMO* may amend the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.

(h) *AEMO* must comply with the *Rules consultation procedures* when making or amending the *SRAS* assessment guidelines, the *SRAS* quantity guidelines and the *SRAS* description.

3.11.4B Determination of electrical sub-network boundaries

(a) For the purpose of acquiring *system restart ancillary services* and determining and implementing the *system restart plan*, the *power system* is to be divided into *electrical sub-networks*.

(b) *AEMO* must determine the boundaries of the *electrical sub-networks* in accordance with the guidelines determined by the *Reliability Panel* under clause 8.8.3(aa)(5).

(c) *AEMO* must comply with the *Rules consultation procedures* in determining the boundaries of the *electrical sub-networks*.

3.11.5 Tender process for non-market ancillary services

(a) Except as provided in clause 4.8.9, if *AEMO* proposes to acquire a *non-market ancillary service*, *AEMO* must call for offers in accordance with the *NMAS* tender guidelines from persons who are in a position to provide the *non-market ancillary service* so as to have the required effect at a *connection* to a *transmission network*.

(b) *AEMO* must determine and *publish* the *NMAS* tender guidelines. Separate *NMAS* tender guidelines may be prepared in respect of *network control ancillary services* and *system restart ancillary services*. The *NMAS* tender guidelines must contain the following:

(1) a requirement for *AEMO* to call for *NMAS* expressions of interest before issuing an *NMAS* invitation to tender in relation to any required *non-market ancillary services*;

(2) a requirement that a person who is required to provide *SRAS* under an *ancillary services agreement* has the *facility* tested in accordance with:

(i) the *SRAS* assessment guidelines referred to in clause 3.11.4A(e); and

(ii) the timeframes for physical testing referred to in subparagraph (5);

(3) a requirement that a person who is to provide *network control ancillary services* under an *ancillary services agreement* has the *facility* tested in accordance with the *NMAS* tender guidelines;

(4) a requirement for a *Network Service Provider* or other *Registered Participant* to assist a prospective tenderer in identifying and, if possible, resolving issues that would prevent the delivery of effective *system restart ancillary services* proposed by a prospective tenderer;

(5) the timeframes over which *AEMO's* assessment of *NMAS* tenders and physical testing of selected *non-market ancillary services* will occur;

(6) the period for which each *non-market ancillary service* may be contracted;

(7) a requirement for a tenderer to provide data, models and parameters of relevant *plant*, sufficient to facilitate a thorough assessment of the *network* impacts and *power station* impacts of the use of the relevant *non-market ancillary service*;

(8) the minimum terms and conditions of the *ancillary services agreement* that a successful tenderer would be expected to enter into with *AEMO*;

(9) the principles *AEMO* must adopt in assessing *NMAS* tenders; and

(10) any other matter considered appropriate by *AEMO*.

(c) *AEMO* may amend the *NMAS* tender guidelines and must comply with the *Rules consultation procedures* when making or amending the *NMAS* tender guidelines.

(d) A *Registered Participant* is not under any obligation to submit an *NMAS* tender in response to an *NMAS* invitation to tender.

(e) *AEMO* is not under any obligation to accept the lowest priced *NMAS* tender or any *NMAS* tender in response to an *NMAS* invitation to tender.

(f) A *Network Service Provider* must:

(1) negotiate in good faith with a prospective tenderer in respect of issues the *NMAS* tender guidelines require a prospective tenderer to discuss and, if possible, resolve with a *Network Service Provider*; and

(2) participate in, or facilitate, testing of a *system restart ancillary service* required by the *NMAS* tender guidelines where it is reasonable and practicable to do so, and when participating in or facilitating such activities, the *Network Service Provider* will be entitled to recover from the relevant *Registered Participant* all reasonable costs incurred by the *Network Service Provider* and for such purposes the activities of the *Network Service Provider* will be treated as *negotiable services*.

(g) Where a *Registered Participant* submits a *NMAS* tender in response to a *NMAS* invitation to tender and *AEMO* wishes to negotiate an aspect of that *NMAS* tender, *AEMO* and the *Registered Participant* must negotiate in good faith concerning that aspect.

(h) Where the tender is for *network control ancillary services*, in assessing any offers submitted in response to a call for offers under this clause 3.11.5, *AEMO* must seek to acquire the quantity of the relevant kind of *network control ancillary services* determined in accordance with clause 3.11.4 by competitive tender and in accordance with this clause 3.11.5(h). A tender will be deemed to be a competitive tender for a particular *network control ancillary service* if the required quantity of that service determined in accordance with clause 3.11.4 can be supplied from the conforming offers received by *AEMO* with any one conforming offer discarded or all conforming offers from any one party discarded. If a tender process is not deemed to be a competitive tender for a particular *network control ancillary service*, then *AEMO* and those *Registered Participants* that submitted conforming and non-conforming tenders selected

by *AEMO*, must negotiate in good faith to agree reasonable terms and conditions for the supply of the relevant kind of *network control ancillary service*, taking into account the need to:

(1) subject to clause 3.11.5(h)(2), so far as practicable minimise the overall cost of supply of that service; and

(2) appropriately remunerate the providers of the relevant *network control ancillary service* for that service.

(i) If *AEMO* and the *Registered Participants* selected by *AEMO* cannot agree on the terms and conditions for the supply of a *network control ancillary service* after 21 *business days* from delivery to the *Registered Participant* of a written notice to negotiate, then either *AEMO* or the *Registered Participant* may refer the matter to an *Adviser* for the determination of a dispute as to those terms and conditions in accordance with rule 8.2.

(j) Subject to clause 3.11.5(k), *AEMO* must not acquire *non-market ancillary services* from any person who is not a *Registered Participant*.

(k) *AEMO* may enter into an agreement to acquire *non-market ancillary services* with a person who is not a *Registered Participant* if that agreement includes a condition for the benefit of *AEMO* that no *ancillary services* will be provided under the agreement until that person becomes a *Registered Participant*.

(l) If *AEMO* calls for offers under clause 3.11.5(a) in respect of a type of *non-market ancillary service*, *AEMO* must give notice to *Registered Participants* when it believes that it has available, under *ancillary services agreements*, a sufficient quantity of that type of *non-market ancillary service* (as determined by applying the procedure developed under clause 3.11.4(b) or clause 3.11.4A(f), whichever is relevant).

(m) Within 5 *business days* of *AEMO* giving a notice under clause 3.11.5(l), *AEMO* must *publish* the total quantity of each kind of *network control ancillary service* acquired by *AEMO* under *ancillary services agreements* under clause 3.11.5.

(n) Within 5 *business days* of *AEMO* giving a notice under clause 3.11.5(l), *AEMO* must *publish*:

(1) the total estimated annual cost for the provision of *system restart ancillary services*, broken down to charges for availability and use, or other factors that *AEMO* considers appropriate for each *electrical sub-network*; and

(2) the number of those services procured for each *electrical sub-network*.

(o) A *Registered Participant* must comply with an *ancillary services agreement* between the *Registered Participant* and *AEMO* under which the *Registered Participant* provides one or more *non-market ancillary services*.

(p) A dispute concerning any aspect, (other than the aspect of price), of a *system restart ancillary services* agreement or a tender conducted by *AEMO* for the

acquisition of *system restart ancillary services*, must be dealt with in accordance with rule 8.2.

3.11.6 Procedures for the dispatch of non-market ancillary services by AEMO

(a) *AEMO* must develop procedures for:

(1) dispatching each kind of *non-market ancillary service AEMO* requires in order to maintain the *power system* in a *secure operating state*; and

(2) reporting to *Registered Participants*, on a periodic basis, on the effectiveness of the *dispatch* of *non-market ancillary services* using criteria related to the performance of the *power system* specified in the procedures developed pursuant to clause 3.11.6(a)(1).

(b) *AEMO* must make the procedures developed under this clause 3.11.6 available to the *Registered Participants*.

(c) *AEMO* may amend a procedure developed under this clause 3.11.6, from time to time.

(d) *AEMO* must comply with the *Rules consultation procedures* when making or amending procedures pursuant to clause 3.11.6.

3.11.7 Performance and testing

(a) In addition to the requirements under rule 4.15, a *Market Participant* which has classified a *generating unit* as an *ancillary service generating unit* or a *market load* as an *ancillary service load* must install and maintain in accordance with the standards referred to in clause 3.11.7(b) monitoring equipment to monitor and record the response of the *ancillary service generating unit* or *ancillary service load* to changes in the *frequency* of the *power system*.

(b) *AEMO* must develop, and may amend from time to time, standards which must be met by *Market Participants* in installing and maintaining the equipment referred to in clause 3.11.7(a).

(c) *AEMO* may request a *Market Participant* with an *ancillary service generating unit* or an *ancillary service load* to provide to *AEMO* a report detailing how the relevant facility responded to a particular change or particular changes in the *frequency* of the *power system*. A *Market Participant* must provide a report requested under this clause 3.11.7(c) promptly but, in any event, in no more than 20 *business days* after notice to do so.

(d) *AEMO* may from time to time require a *Registered Participant* which provides a *market ancillary service* under the *Rules* or a *non-market ancillary service* under an *ancillary services agreement* to demonstrate the relevant *plant's* capability to provide the *ancillary service* to the satisfaction of *AEMO* according to standard test procedures. A *Registered Participant* must promptly comply with a request by *AEMO* under this clause.

3.12 Market Intervention by AEMO

3.12.1 Intervention settlement timetable

(a) *AEMO* must use reasonable endeavours to complete and fulfil its obligations set out in clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C as soon as practicable and no later than:

(1) 100 *business days* after the end of the *AEMO intervention event* or the end of a series of related *AEMO intervention events* if *AEMO* is not required to appoint an independent expert pursuant to clause 3.15.7A; and

(2) 150 *business days* after the end of the *AEMO intervention event* or the end of a series of related *AEMO intervention events* if *AEMO* is required to appoint an independent expert pursuant to clause 3.15.7A.

(b) Subject to clause 3.12.1(a), *AEMO* must *publish* a timetable that sets a date for each of *AEMO's* and the independent expert's obligations pursuant to clauses 3.12.2, 3.12.3, 3.15.7, 3.15.7A, 3.15.7B, 3.15.8 and 3.15.10C, where required (the "*intervention settlement timetable"*).

(c) *AEMO* must at least once a month revise and *publish* the *intervention settlement timetable* to reflect any changes to the *intervention settlement timetable.*

3.12.2 Affected Participants and Market Customers entitlements to compensation in relation to AEMO intervention

(a) In respect of each *intervention price trading interval*:

(1) an *Affected Participant* is entitled to receive from *AEMO,* or must pay to *AEMO*, an amount as determined in accordance with this clause 3.12.2 that will put the *Affected Participant* in the position that the *Affected Participant* would have been in regarding the *scheduled generating unit* or *scheduled network service,* as the case may be, had the *AEMO intervention event* not occurred, taking into account solely the items listed in paragraph (j);

(2) a *Market Customer,* other than a *Market Customer* which was the subject of any *direction* that constituted the *AEMO intervention event*, is entitled, in respect of one or more of its *scheduled loads,* to receive an amount calculated by applying the following formula:

$$DC = ((RRP \times LF) - BidP) \times QD$$

where:

DC (in dollars) is the amount the *Market Customer* is entitled to receive in respect of that *scheduled load* for the relevant *intervention price trading interval*;

RRP (in dollars per MWh) is the *regional reference price* in the relevant *intervention price trading interval* determined in accordance with clause 3.9.3;

LF where the *scheduled load's connection point* is a *transmission connection point*, is the *intra-regional loss factor* at that *connection point* or where the *scheduled load's connection point* is a *distribution network connection point,* is the product of the *distribution loss factor* at that *connection point* multiplied by the *intra-regional loss factor* at the *transmission connection point* to which it is assigned;

BidP (in dollars per MWh) is the price of the highest priced *price band* specified in a *dispatch offer* for the *scheduled load* in the relevant *intervention price trading interval;*

QD (in MWh) is the difference between the amount of electricity consumed by the *scheduled load* during the relevant *intervention price trading interval* determined from the *metering data* and the amount of electricity which *AEMO* reasonably determines would have been consumed by the *scheduled load* if the *AEMO intervention event* had not occurred,

provided that if DC is negative for the relevant *intervention price trading interval,* then the adjustment that the *Market Customer* is entitled to claim in respect of that *scheduled load* for that *intervention price trading interval* is zero.

(b) In respect of a single *intervention price trading interval,* an *Affected Participant* or *Market Customer* is not entitled to receive from, or obliged to pay to, *AEMO* an amount pursuant to this clause 3.12.2 if such an amount is less than $5,000.

(c) In respect of each *intervention price trading interval, AEMO* must, in accordance with the *intervention settlement timetable,* notify, in writing:

(1) each *Affected Participant* (except *eligible persons*) of:

(i) the estimated level of *dispatch* in MW that its *scheduled network service* or *scheduled generating unit* would have been *dispatched* at had the *AEMO intervention event* not occurred; and

(ii) an amount equal to:

(A) the estimated *trading amount* that it would have received had the *AEMO intervention event* not occurred based on the level of *dispatch* in subparagraph (i), less:

(B) the *trading amount* for that *Affected Participant* (excluding from that *trading amount* the amount referred to in clause 3.15.10C(a)) as set out in its *final statement* provided pursuant to clause 3.15.14 for the *billing period* in which the *intervention price trading interval* occurs;

(2) each *eligible person* of:

(i) the estimated level of flow in MW of all relevant *directional interconnectors* that would have occurred had the *AEMO intervention event* not occurred; and

(ii) an amount equal to:

(A) the estimated amount that person would have been entitled to receive pursuant to clause 3.18.1(b) had the *AEMO intervention event* not occurred based upon the flows referred to in subparagraph (i); less

(B) the actual entitlement of that person under clause 3.18.1(b); and

(3) each *Market Customer,* the amount calculated by *AEMO* in accordance with paragraph (a)(2) for that *Market Customer.*

(d) *AEMO* must include in an *Affected Participant's* or *Market Customer's final statement* provided pursuant to clause 3.15.1 for a *billing period* in which one or more *intervention price trading intervals* occurred:

(1) the amount notified by *AEMO* pursuant to paragraph (c) if the absolute value of such amount is greater than $5,000; and

(2) in all other cases no amount in relation to compensation pursuant to this clause 3.12.2.

(e) If the figure calculated in accordance with paragraph (c) is:

(1) negative, the absolute value of that amount is the amount payable to *AEMO* by the relevant person; and

(2) positive, the absolute value of that amount is the amount receivable from *AEMO* by the relevant person.

(f) Subject to paragraphs (h) and (i), within 7 *business days* of receipt of the notice referred to in paragraph (c) an *Affected Participant* or *Market Customer* may make a written submission to *AEMO* in accordance with paragraph (g) claiming that the amount set out in the notice is greater than, less than, or equal to its entitlement pursuant to paragraph (a)(1) as an *Affected Participant* or paragraph (a)(2) as a *Market Customer*, as the case may be.

(g) A written submission made by an *Affected Participant* or *Market Customer* pursuant to paragraph (f) must:

(1) itemise each component of the claim;

(2) contain sufficient data and information to substantiate each component of the claim;

(3) if the *Affected Participant* claims that the amount calculated by *AEMO* pursuant to paragraphs (c)(1) or (c)(2) is less than the amount the

Affected Participant is entitled to receive pursuant to paragraph (a)(1), specify the difference between such amounts (such difference being the "*affected participant's adjustment claim");*

(4) if the *Market Customer* claims that the amount calculated by *AEMO* pursuant to paragraph (c)(3) is less than the amount the *Market Customer* is entitled to receive pursuant to paragraph (a)(2), specify the difference between such amounts (such difference being the *"market customer's additional claim"*); and

(5) be signed by an authorised officer of the *Affected Participant* or *Market Customer* certifying that the written submission is true and correct.

(h) If an *Affected Participant* or *Market Customer* does not deliver to *AEMO* a written submission in accordance with paragraph (f) it shall cease to have an entitlement to compensation under this clause 3.12.2.

(i) In respect of a single *intervention price trading interval* an *Affected Participant* or *Market Customer* may only make a claim pursuant to paragraph (f) in respect of that *intervention price trading interval* if it claims that its entitlement or liability pursuant to this clause 3.12.2 is greater than $5,000.

(j) In determining the amount for the purposes of paragraph (a)(1), the following must, as appropriate, be taken into account:

(1) the direct costs incurred or avoided by the *Affected Participant* in respect of that *scheduled generating unit* or *scheduled network service,* as the case may be, as a result of the *AEMO intervention event* including:

(i) fuel costs in connection with the *scheduled generating unit* or *scheduled network service*;

(ii) incremental maintenance costs in connection with the *scheduled generating unit* or *scheduled network service*; and

(iii) incremental manning costs in connection with the *scheduled generating unit* or *scheduled network service*;

(2) any amounts which the *Affected Participant* is entitled to receive under clauses 3.15.6 and 3.15.6A; and

(3) the *regional reference price published* pursuant to clause 3.13.4(m).

(k) *AEMO* must in accordance with the *intervention settlement timetable* calculate the "*additional intervention claim*" being the total of:

(1) the sum of the *affected participant's adjustment claims* and *market customer's additional claims* in respect of a *AEMO intervention event*, or in respect of, in *AEMO's* reasonable opinion, a series of related *AEMO intervention events*; plus

(2) the total claims by *Directed Participants* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) in respect of that *AEMO intervention event*, or in respect of that series of related *AEMO intervention events*.

(l) *AEMO* must in accordance with the *intervention settlement timetable*:

(1) refer an *affected participant's adjustment claim* or *market customer's additional claim* to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than $20,000 and the *additional intervention claim* that includes that claim is equal to or greater than $100,000; and

(2) determine in its sole discretion whether all other *affected participants' adjustment claims* and *market customers' additional claims* are reasonable and if so pay the amounts claimed in accordance with clause 3.15.10C.

(m) If *AEMO* determines pursuant to paragraph (l) that an *affected participant's adjustment claim* or *market customer's additional claim* in respect of a *AEMO intervention event* is unreasonable, it must in accordance with the *intervention settlement timetable:*

(1) advise the *Affected Participant* or *Market Customer*, as the case may be, in writing of its determination including its reasons for the determination; and

(2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.

(n) For the purposes of clauses 3.15.8 and 3.15.10C(b) any payment pursuant to paragraph (a) must include interest on the sum of that amount less the payment made in accordance with 3.15.10C(a)(1), computed at the average *bank bill rate* for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *AEMO intervention event* occurred to the date on which payment is required to be made pursuant to clause 3.15.10C.

3.12.3 Role of the Independent Expert in calculating payments in relation to intervention by AEMO

(a) Subject to clause 3.12.3(a1), if a matter is to be referred to an independent expert pursuant to clauses 3.12.2(l), 3.12.2(m) or 3.15.7B, *AEMO* must in accordance with the *intervention settlement timetable publish* a notice of its proposed nominee as independent expert and appoint such nominee.

(a1) If within 3 *business days* of *publication* of *AEMO's* nominee pursuant to clause 3.12.3(a) more than 25% of the *Referred Affected Participants, Referred Market Customers* and *Referred Directed Participants* in relation to that *direction* object in writing to *AEMO's* nominee *AEMO* must, as soon as reasonably practicable thereafter, request the *AEMC* to nominate an independent expert.

(a2) If a valid objection pursuant to clause 3.12.3(a1) is made, the *AEMC* must, within 3 *business days* of a written request from *AEMO*, nominate an independent expert to be appointed by *AEMO* for the purposes of this clause 3.12.3.

(b) *AEMO* must provide to the independent expert a copy of all written submissions made by *Referred Affected Participants*, *Referred Market Customers* or *Referred Directed Participants* under clause 3.12.2(f) or 3.15.7B (a).

(b1) To the extent reasonably practicable, all claims arising out of a single *AEMO intervention event* or arising out of, in *AEMO's* reasonable opinion, a series of related *AEMO intervention events*, should be determined by the same independent expert as part of the same process.

(c) *AEMO* must include as part of the independent expert's terms of appointment the following requirements:

(1) In accordance with the *intervention settlement timetable* the independent expert must:

(i) determine and *publish* a draft report setting out:

(A) as appropriate, the total compensation payable by, or receivable by, *Referred Affected Participants* and *Referred Market Customers* under clause 3.12.2(a) pursuant to claims referred to the independent expert pursuant to clauses 3.12.2(l) and 3.12.2(m) in respect of the *intervention price trading interval*;

(B) the total amount of compensation payable to *Referred Directed Participants* pursuant to clause 3.15.7B; and

(C) the methodology and assumptions, if any, used by the independent expert in making the determination in clauses 3.12.3(c)(1)(ii) and 3.12.3(c)(1)(iii);

(ii) notify individual assessments by delivery to each *Referred Affected Participant* and *Referred Market Customer* and to *AEMO* of a draft assessment detailing the amount payable or receivable by that party, as the case may be, pursuant to clause 3.12.2(a); and

(iii) deliver to each *Referred Directed Participant* and to *AEMO* a draft assessment detailing the calculation of the amount of compensation receivable by that party pursuant to 3.15.7B.

(2) The independent expert must call for submissions from all relevant *Referred Affected Participant*s, *Referred Market Customer*s and *Referred Directed Participant*s after *publishing* the draft report and delivering the draft assessment under clause 3.12.3(c)(1).

(3) Before the *publication* of the final report and delivery of the final assessment pursuant to clause 3.12.3(c)(4), the independent expert must:

(i) if requested to do so by a *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant*, within 15 *business days* of the *publication* of the draft report and draft assessment, meet with *representatives* of the *Referred Affected Participant*, *Referred Market Customer*, or *Directed Participant* to discuss any queries it has in relation to the draft report or draft assessment as appropriate; and

(ii) take into consideration, any further written submissions made by a *Referred Affected Participant*, *Referred Market Customer* or *Referred Directed Participant* in relation to the draft report or draft assessment, as the case may be, if the independent expert receives those submissions within 15 *business days* of the *publication* of the draft report and draft assessment.

(4) The independent expert must in accordance with the *intervention settlement timetable*:

(i) prepare and *publish* a final report;

(ii) prepare and deliver his or her final assessment of the amounts payable or receivable by the relevant party pursuant to clause 3.12.2(a) or 3.15.7B, as the case may be; and

(iii) deliver to *AEMO* a final tax invoice for the services rendered by the independent expert and a copy of all final assessments issued pursuant to clause 3.12.3(c)(ii).

(5) A report prepared under clauses 3.12.3(c)(1)(i) and 3.12.3(c)(4)(i) must not disclose *confidential information*.

(6) If the independent expert requires further information than that contained in a written submission made by the *Referred Affected Participant, Referred Market Customer* or *Referred Directed Participant* under clause 3.12.2(f) or 3.15.7B(a), the independent expert may advise the relevant party in writing of the information required.

(7) If the relevant party has not provided that information to the independent expert within 10 *business days* of the date of the request for further information, then the independent expert, acting reasonably, is entitled to make such assumptions concerning that information as he or she thinks appropriate.

(8) The independent expert must enter into, and deliver, a confidentiality deed for the benefit of each *Referred Affected Participant*, *Referred Market Customer* and *Referred Directed Participant* in a form developed by *AEMO* pursuant to clause 3.12.3(e).

(d) A final report and a final assessment of an independent expert prepared in accordance with clause 3.12.3(c)(4) is final and binding.

(e) *AEMO* must in accordance with the *Rules consultation procedures* prepare and *publish* a confidentiality deed for the purposes of this clause 3.12.3.

3.12A Mandatory restrictions

3.12A.1 Restriction offers

(a) *AEMO* must develop, and may vary from time to time, in accordance with the *Rules consultation procedures* a *mandatory restrictions* trading system. The trading system must include:

(1) procedures for the acquisition by *AEMO* of capacity the subject of *restriction offers*;

(2) the standard terms and conditions upon which *AEMO* shall accept a *restriction offer*;

(3) the criteria to be applied by *AEMO* in the appointment of an appropriately qualified independent expert for the purposes of clause 3.12A.7(g)(ii); and

(4) procedures for the rebidding and *dispatch* of capacity the subject of an *accepted restriction offer.*

(b) The *restriction offer procedures* must take into account the following principles:

(1) *AEMO* may accept a *restriction offer* for all or part of the capacity of a *scheduled generating unit* or *scheduled network service*, as recorded in the *registered bid and offer data* for that *scheduled generating unit* or *scheduled network service*.

(2) *AEMO* must use its reasonable endeavours to acquire capacity from valid *restriction offers* or to terminate in whole or part an *accepted restriction offer* in a manner that minimises the estimated *restriction shortfall amount*.

(3) *AEMO* may at any time terminate an *accepted restriction offer* in whole or in part by providing 4 hours notice to the relevant *Scheduled Generator* or *Scheduled Network Service Provider* that an *accepted restriction offer* is so terminated.

(4) The submission of *restriction offers* must be made in the form and by the means set out in procedures developed and *published* by *AEMO* for the purpose of the submission of *restriction offers*.

(5) If a *restriction offer* is made in accordance with the *restriction offer procedures*, *AEMO* must make available to the parties who submitted the *restriction offer* the following information without delay:

(i) acknowledgment of receipt of a valid *restriction offe*r; and

(ii) notification detailing why a *restriction offer* is invalid, if appropriate.

(6) If any details contained within a *restriction offer* are inconsistent with the *registered bid and offer data* provided by the relevant party then *AEMO* has the right to reject that *restriction offer* as invalid.

(7) A valid *restriction offer* must set out for each *trading interval* of a *trading day*:

(i) the price offered in $/MWh or as otherwise permitted by the *restriction offer procedures;* and

(ii) MW amount for that *trading interval* being offered.

(8) *AEMO* must only accept *restriction offers* from *Scheduled Generators* and *Scheduled Network Service Providers* with a *connection point* located in the *region* in which *mandatory restrictions* apply or are proposed to apply.

(c) The standard terms and conditions developed by *AEMO* pursuant to clause 3.12A.1(a)(2) must take into account the following principles:

(1) All capacity the subject of the *restriction offer* must be available for immediate *dispatch* in the *central dispatch* process at all times.

(2) An *accepted restriction offer* is binding and may only be revoked or varied if the *Scheduled Generator* or *Scheduled Network Service Provider* notifies *AEMO* in accordance with the *restriction offer procedures* of a revocation or variation. Immediately upon receipt of such notification *AEMO* must amend the *accepted restriction offer* to reduce the capacity of the *accepted restriction offer* by the notified capacity. Such capacity must not be *dispatched* by *AEMO* pursuant to a *dispatch offer* for such capacity during the remainder of the *trading day* in which the *accepted restriction offer* was revoked or varied in accordance with this clause 3.12.A.1(c) provided that such capacity may be re-offered as a *restriction offer.*

(3) A *restriction offer* may be amended or revoked in accordance with the *restriction offer procedures* at any time prior to it becoming an *accepted restriction offer.*

3.12A.2 Mandatory restrictions schedule

(a) *AEMO* must, within 4 hours of receipt of a formal written notice from a *Jurisdictional Co-ordinator* advising that the relevant *participating jurisdiction* proposes to invoke *mandatory restrictions*:

(1) in consultation with such *participating jurisdiction*, and in accordance with any procedures developed with that *participating jurisdiction*, estimate the effect in MW of the *mandatory restrictions* on the *region's* demand for each *trading interval* of the next *trading day* of the proposed *mandatory restriction period*; and

(2) prepare and deliver to the *Jurisdictional Co-ordinator* a schedule of capacity for each *trading interval* of the next *trading day* of the proposed

mandatory restriction period which is approximately equal to the estimated reduction in *regional* demand due to the *mandatory restrictions* net of all *scheduled loads* in that *region*.

(b) *AEMO* must regularly in conjunction with the relevant *Jurisdictional Co-ordinator* review the current *mandatory restriction schedule* and when appropriate prepare and deliver to the *Jurisdictional Co-ordinator* a revised schedule of capacity for each *trading interval* of that *trading day* which is approximately equal to the revised estimated reduction in *regional* demand due to the *mandatory restrictions* net of all s*cheduled loads* in that *region*.

(c) *AEMO* may only *publish* a *mandatory restriction schedule* and an amended *mandatory restriction schedule* upon receipt of a formal written notice approving the *mandatory restriction schedule* from the relevant *Jurisdictional Co-ordinator.*

3.12A.3 Acquisition of capacity

(a) *AEMO* must immediately upon *publication* of a *mandatory restriction schedule* or an amended *mandatory restriction schedule* use its reasonable endeavours to acquire, in accordance with the *restriction offer procedures*, capacity to meet the *mandatory restriction schedule* or amended *mandatory restriction schedule* as the case may be.

(b) *AEMO* must terminate in accordance with the *restriction offer procedures* such number of *accepted restriction offers,* in whole or in part, so that the total capacity of existing *accepted restriction offers* as far as practicable equals the amended *mandatory restriction schedule.*

3.12A.4 Rebid of capacity under restriction offers

In each *dispatch interval* when *mandatory restrictions* apply, each *scheduled generating unit* or *scheduled network service* the subject of an *accepted restriction offer* with respect to that *dispatch interval* must rebid the total capacity the subject of such *restriction offer* by varying the respective *dispatch offers* or *network dispatch offers* in accordance with the procedures developed pursuant to clause 3.12A.1(a)(4).

3.12A.5 Dispatch of restriction offers

(a) In a *dispatch interval AEMO* may only *dispatch* the capacity of a *scheduled generating unit* or *scheduled network service* in accordance with the procedures for the *rebidding* and *dispatch* of capacity the subject of an *accepted restriction offer* developed by *AEMO* in consultation with *Registered Participants*. Such procedures must as far as reasonably practical incorporate the following principles:

(i) *dispatch* of *accepted restriction offers* only after all the capacity of *scheduled loads*, *scheduled generating units* and *scheduled network services* contained in valid *dispatch offers* and *dispatch bids* have been *dispatched*;

(ii) recognise any requirement for advance notice or action for generators to operate at minimum generation, provide advance notice to *loads* or obtain capacity of *market network services* that are or may become the subject of a *AEMO intervention event*;

(iii) be consistent with the price of *accepted restriction offers* in accordance with clause 3.12A.6; and

(iv) minimise the *restriction shortfall amount*.

(b) Notwithstanding the provisions of this clause 3.12A.5, at no time is *AEMO* required to *dispatch* the capacity of a *Scheduled Generator* or *Scheduled Network Service Provider* the subject of an *accepted restriction offer* if such *dispatch* would prevent *AEMO* from meeting its obligations for system security.

3.12A.6 Pricing during a restriction price trading interval

During a *mandatory restriction period*, *dispatch prices* must be determined by the *central dispatch* process based on *dispatch offe*rs, *dispatch bid*s and *network dispatch offers* in accordance with clause 3.9.2, provided that *AEMO* must calculate the *dispatch price* as if the *dispatch offer price* for all capacity the subject of an *accepted restriction offer* was the maximum price permitted by clause 3.8.6(c) and 3.8.6A(i) notwithstanding any other provision of the *Rules*.

3.12A.7 Determination of funding restriction shortfalls

(a) *AEMO* is entitled to the *trading amount* received by *Scheduled Generators* and *Scheduled Network Service Providers* from the *dispatch* of capacity the subject of an *accepted restriction offer* in accordance with 3.15.10B.

(b) *AEMO* must, as soon as reasonably practicable following the end of a *mandatory restriction period*, calculate:

(i) the aggregate amount payable to *AEMO* pursuant to clause 3.12A.7(a) from all *accepted restriction offers* in that *mandatory restriction period*;

(ii) the aggregate amount payable by *AEMO* pursuant to all *accepted restriction offers* in that *mandatory restriction period*; and

(iii) the sum of the amount determined under clause 3.12A.7(b)(i) less the amount determined under clause 3.12A.7(b)(ii) (the *'restriction shortfall amount'*).

(b1) The maximum amount payable to a *Scheduled Generator* or *Market Participant* for any *accepted restriction offer* of that *Scheduled Generator* or *Market Participant* during a *mandatory restriction period* is the aggregate of the maximum possible *spot price* for each *trading interval* within the *mandatory restriction period,* being the *market price cap* or an *administered price cap* as the case may be, multiplied by the capacity of the *accepted restriction offer* in MWh for each corresponding *trading interval.*

(c) Notwithstanding any other provisions of the *Rules*, the absolute value of the *restriction shortfall amount* must not exceed the sum of the maximum possible *spot price* for a *trading interval,* being the *market price cap* or an *administered price cap* as the case may be, multiplied by the aggregate of the capacity of all *accepted restriction offers* in MWh for that *trading interval* for all *trading intervals* in the *mandatory restriction period.*

(d) Notwithstanding any other provision of the *Rules*, if the *restriction shortfall amount* is capped pursuant to clause 3.12A.7(c) and the *restriction shortfall amount* calculated pursuant to clause 3.12A.7 is a negative number, then the amount payable by *AEMO* pursuant to each *accepted restriction offer* is to be reduced pro-rata until clause 3.12A.7(c) is satisfied.

(e) If the *restriction shortfall amount* is a negative number, *Market Customers* in the relevant *region* must pay to *AEMO* an amount determined in accordance with clause 3.12A.7(f) or 3.12A.7(g).

(f) If the *restriction shortfall amount* is between minus $100,000 and $0, then each *Market Customer* in the relevant *region* must pay to *AEMO* an amount determined in accordance with the following formula:

$$MCP = RSA \quad x \quad \frac{(AGE)}{(AAGE)}$$

Where:

MCP is the amount payable by a *Market Customer* in accordance with this clause 3.12A.7(f).

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

(g) If the *restriction shortfall amount* is less than minus $100,000:

(i) each *Market Customer* in the relevant *region* must pay to *AEMO* an amount determined in accordance with the following formula:

RCP = (RSA + IE) x (RD/TRD)

Where

RCP is the amount payable to *AEMO* by a *Market Customer* in that *region* following the cessation of the *mandatory restriction period*.

RSA is the *restriction shortfall amount* incurred by *AEMO* upon the cessation of the *mandatory electricity restriction period*.

RD is the *Market Customer's restriction demand reduction*.

TRD is the sum of RD for all *Market Customers* in the relevant *region*.

IE is the amount of the independent expert's final tax invoice delivered to *AEMO* in accordance with clause 3.12A.7(i)(11) plus any amounts payable by *AEMO* on behalf of the independent expert as determined by the *dispute resolution panel* established in accordance with clause 3.12A.7(m); and

(ii) *AEMO* must within 10 days of the end of a *mandatory restriction period* appoint an appropriately qualified independent expert as *AEMO's* agent to determine the *restriction demand reduction* claimed by each *Market Customer* in a *region* for the purposes of clause 3.12A.7(g).

(h) If the *restriction shortfall amount* is a positive number then *AEMO* must pay to *Market Customers* in the relevant *region* an amount equal to:

$$RCRP = RSA \times \frac{(AGE)}{(AAGE)}$$

Where:

RCRP is the payment to be made by *AEMO* to *Market Customers* pursuant to this clause 3.12A.7.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh.

(i) When appointing the independent expert under clause 3.12A.7(g), *AEMO* must include as part of the independent expert's terms of appointment the following requirements:

(1) The independent expert must prepare a statement of the principles which the independent expert believes should be followed in determining the *restriction demand reduction* of *Market Customer*s.

(2) Within 5 *business days* of his or her appointment, the independent expert must provide *AEMO* with details of his or her estimated fees and costs.

(3) Within 5 *business days* of his or her appointment, the independent expert must provide the statement prepared under clause 3.12A.7(i)(1) to all *Market Customers* in the relevant *region* and request that each *Market Customer* in the relevant *region* provide him or her with details of the *restriction demand reduction* claimed by that *Market Customer* and such

additional information specified by the independent expert to fulfil its obligations.

(4) The independent expert must offer to meet with and consult each *Market Customer* who may be liable to make a payment to *AEMO* pursuant to clause 13.12A.7(g).

(5) The independent expert must within 30 *business days* of his or her appointment or such later date as approved by *AEMO* in its sole discretion:

(i) *publish* a draft report; and

(ii) provide each *Market Customer* in the relevant *region* with a draft statement.

(6) The draft report must contain:

(i) the *restriction shortfall amount* based upon the independent expert's estimated fees and costs; and

(ii) the methodology used by the independent expert in determining the *restriction demand reduction* of each *Market Customer* in a *region.*

The draft report must not contain details pertaining to individual *Market Customers.*

(7) A draft statement provided to a *Market Customer* must contain:

(i) the *Market Customer's restriction demand reduction* as determined by the independent expert;

(ii) the estimated amount payable by that *Market Customer* under clause 3.12A.7(g), based upon the independent experts estimated fees and costs; and

(iii) information showing how the estimated amount referred to in clause 3.12A.7(i)(7)(ii) was calculated.

(8) The independent expert must within 50 *business days* of his or her appointment or such later date as approved by *AEMO* in its sole discretion make any necessary amendments to his or her draft report and draft statements following consultation with *Market Customer*s, and:

(i) *publish* his or her final report; and

(ii) provide each *Market Customer* in the relevant *region* with a final statement.

(9) The independent expert's final report must contain the information set out in clause 3.12A.7(i)(6).

(10) A final statement provided to a *Market Customer* by the independent expert must contain the information set out in clause 3.12A.7(i)(7).

(11) The independent expert must provide *AEMO* with his or her final tax invoice for services rendered at the time of publication of the final report.

(i1) Each *Market Customer* must within 10 *business days* of the independent expert requesting information in accordance with clause 3.12A.7(i)(3) deliver to the independent expert all such information.

(i2) The independent expert may request a *Market Customer* to provide further information that he or she requires to prepare either the draft or final report or a draft or final statement within 5 *business days* of the request being made.

(j) A *Market Customer* must not unreasonably withhold information sought by the independent expert and must use its reasonable endeavours to provide the independent expert with the information required within the relevant timeframe specified in this clause 3.12A.7.

(k) If a *Market Customer* has not provided the independent expert with information required under this clause 3.12A.7 within the specified time period, then the independent expert is entitled to make such assumptions concerning that information as he or she thinks appropriate.

(l) Subject to the review process specified in clause 3.12A.7(m), a determination made by an independent expert appointed under clause 3.12A.7(g) binds all *Market Customer*s.

(m) Following the publication of the independent expert's final report, a *Market Customer* may request the *Adviser* to establish a *dispute resolution panel* to redetermine that *Market Customer's restriction demand reduction* only if the *Market Customer* reasonably believes that the independent expert's determination:

(1) has incorrectly assessed the *restriction demand reduction* of that Market Customer by more than 10%; or

(2) was made negligently or in bad faith.

(n) The determination of a *dispute resolution panel* established under clause 3.12A.7(m):

(1) binds all *Market Customers* and each *Market Customer* must comply with a determination of the *dispute resolution panel*; and

(2) may only order reimbursement of the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination and no other amounts.

(o) Any amounts determined by the *dispute resolution panel* as payable by *AEMO* on behalf of the independent expert for the reasonable fees and expenses incurred by a *Market Customer* in disputing the independent expert's determination must be included on the next statement provided under clauses 3.15.14 and 3.15.15.

3.12A.8 Cancellation of a mandatory restriction period

(a) At the cessation time designated in the *mandatory restriction schedul*e, *AEMO* must:

(1) immediately terminate all current *restriction offers*; and

(2) *publish* a notice detailing the termination of all current *restriction offers* following the cancellation of the relevant *mandatory restriction perio*d.

3.12A.9 Review by AEMC

(a) The *AEMC* must, in accordance with clause 3.12A.9(b), conduct a review of the operation of the provisions applicable to *mandatory restrictions* including:

(1) the integration of *restriction offers* and *mandatory restrictions* into the *market*; and

(2) any other matters which the *AEMC* reasonably believes are relevant to the operation of clauses 3.12A.1 to 3.12A.8 and clause 3.15.10B.

(b) The review conducted by the *AEMC* in accordance with clause 3.12A.9(a) must:

(1) include an analysis of:

(i) the accuracy of the forecast demand reduction due to restrictions and the impact any error had on the resulting *spot price*;

(ii) whether the impact on the *spot price* resulting from an error in the forecast demand reduction due to restrictions adversely affects one group of *Scheduled Generators* or *Market Participants* over another group;

(iii) the *restriction offer* prices for contracts accepted by *AEMO* in meeting the *mandatory restriction schedule* including a comparison with the expected revenue the capacity subject to the *restriction offer* would have earned in the *spot market* taking into account the circumstances in which *restriction offers* were made;

(2) be conducted in accordance with the *Rules consultation procedures*; and

(3) commence following the first application of the *mandatory restrictions* where the estimated effect in MW of *mandatory restrictions* on a *region's* demand met or exceeded 10% of that *region's* estimated demand for the same period.

3.13 Market Information

3.13.1 Provision of information

(a) In addition to any specific obligation or power of *AEMO* under the *Rules* to provide information, *AEMO* must make available to *Scheduled Generators*,

Semi-Scheduled Generators and *Market Participants* on request any information concerning the operation of the *market* not defined by the *AEMC* or the *Rules* as confidential or commercially sensitive and may charge a fee reflecting the cost of providing any information under this clause 3.13.1(a).

(b) *AEMO* must make information available to the public on request in respect of the *regional reference price* at any *regional reference node* and, where requested and available, reasons for any significant movements in prices.

3.13.2 Systems and procedures

(a) Information must be provided to *AEMO* and by *AEMO* on the *electronic communication system* unless:

(1) the *electronic communication system* is partially or wholly unavailable, then information will, to the extent of that unavailability, be provided to *AEMO* and by *AEMO* by means of the backup procedures specified by *AEMO* from time to time; or

(2) otherwise approved by *AEMO*.

(b) Information must be provided by using the templates supplied in the *electronic communication system* unless otherwise approved by *AEMO*.

(c) Where approved by *AEMO*, information may be transmitted to and from *AEMO* and the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* concerned in any agreed format.

(d) If possible, information provided to *AEMO* must be *time stamped* by *AEMO* on receipt by *AEMO* of the information by the *electronic communication system* and, if stamped, is deemed to be provided at the time indicated by the *time stamp*.

(e) Information that is *published* by *AEMO* is deemed to be *published* when the information is placed on the *market information bulletin board*.

(f) The *market information bulletin board* must be accessible by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* via the *electronic communication system* subject to applicable security requirements.

(g) Information *published* or notified to a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must be capable of being reviewed by that *Generator* or *Market Participant* and be capable of being downloaded from the *market information bulletin board* to the relevant *Generator* or *Market Participant* via the *electronic communication system*.

(h) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* must notify *AEMO* of, and *AEMO* must *publish*, any *changes* to submitted information within the times prescribed in the *timetable*.

(i) *AEMO* must make a copy of all *changes* to the data available to *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* for

verification and resubmission by the relevant *Generator* or *Market Participant* as necessary.

(j) All revisions must be provided on the *electronic communication system* and in the same format as the original information.

(k) A *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* may withhold information from *AEMO* which must otherwise be provided under the *Rules* if:

(1) the information is of a confidential or commercially-sensitive nature and is not information of a kind that, in the reasonable opinion of the *AEMC*, is fundamental to the efficient operation of the *market*; or

(2) disclosure of the information would have the likely effect of causing detriment to the person required to provide it unless, in the reasonable opinion of the *AEMC*, the public benefit resulting from the provision of the information outweighs that detriment.

(l) Nothing in paragraph (k) allows a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* to avoid providing information to *AEMO* under the *Rules* where that information is generally available.

3.13.3 Standing data

(a) *AEMO* must establish, maintain, update and *publish*:

(1) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* and a list of all applications to become a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*, including the *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* information as set out in schedule 3.1;

(2) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* who will cease to be *Scheduled Generators*, *Semi-Scheduled Generators* or *Market Participants* and the time that each listed *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* will cease to be a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant*;

(3) a list of all of the *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* who are or are going to be suspended and the time at which each listed *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* was suspended or will be suspended.

(b) All *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must provide *AEMO* with the *registered bid and offer data* relevant to their *scheduled loads*, *scheduled network services* and *generating units* in accordance with schedule 3.1.

(c) All *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* will be required to provide *AEMO* with information as set out below:

(1) forecasts for *connection points* as prescribed in clause 5.6.1; and

(2) *metering* information for *settlements* purposes as prescribed in Chapter 7.

(d) *Network Service Providers* are to maintain a register of data provided by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* for planning and design purposes in accordance with schedule 5.7 of Chapter 5 and are to provide a copy of this register of data to *AEMO* on request and in a form specified by *AEMO*.

(e) *Network Service Providers* must, without delay, notify and provide *AEMO* with details of any additions or *changes* to the register of data described in clause 3.13.3(d).

(f) Each year, by a date to be specified by *AEMO*, *Network Service Providers* must provide *AEMO* with the following information:

(1) expected *network capability* under normal, *outage* and emergency conditions;

(2) electrical data sufficient to allow *power system* modelling under steady state and dynamic conditions, this data to be made available in hard copy and an acceptable industry standard electronic format approved by *AEMO*; and

(3) operating procedures and practices for *network* operation and maintenance.

(g) *Network Service Providers* must notify *AEMO* of any *changes* to the information provided under clause 3.13.3(f) as soon as practicable.

(h) *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must notify *AEMO* of any *changes* to *registered bid and offer data* one month prior to the implementation of planned *changes* and without unreasonable delay in the event of unplanned *changes*.

(i) *Network Service Providers* must notify *AEMO* of any *changes* or additions to technical data one month prior to the implementation of planned *changes* and without unreasonable delay in the event of unplanned *changes*.

(j) *AEMO* must conduct an annual review of *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant registered bid and offer data* in consultation with *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* and *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must advise *AEMO* of any required *changes* to the data.

(k) A *Registered Participant* may request from *AEMO*:

(1) *registered bid and offer data*;

(2) information that is reasonably required by the *Registered Participant* to carry out *power system* studies (including load flow and dynamic simulations) for planning and operational purposes; and

(3) operation and maintenance procedures and practices for *transmission network* or *distribution network* operation, developed for the purposes of schedule 5.1 sufficient to enable the *Registered Participant* to carry out *power system* modelling under normal, *outage* and emergency conditions.

(l) If *AEMO* holds information requested under clause 3.13.3(k), *AEMO* must provide the requested information to the *Registered Participant* as soon as practicable, subject to the following requirements:

(1) If *AEMO* holds and is required under this paragraph (l) to provide a *releasable user guide* that *AEMO* received under clause S5.2.4(b)(8), *AEMO* must provide the *releasable user guide* to the *Registered Participant* in an unaltered form.

(2) If *AEMO* holds and is required under this paragraph (l) to provide a form of the model source code that *AEMO* received under clauses S5.2.4(b)(6) and S5.2.4(d) or from any other source, *AEMO* must provide that information:

(i) only in the form of, at *AEMO's* discretion:

(A) compiled information (such as, for example, compiled Fortran code in object code or dynamic link library (DLL) form);

(B) encrypted information; or

(C) a secured format agreed by the provider of the model source code,

unless *AEMO* has the written consent of the person who provided the information to *AEMO* to provide it in another form; and

(ii) in a form that can be interpreted by a software simulation product nominated by *AEMO*.

(3) Any information provided by *AEMO* under clause 3.13.3(l) to a *Registered Participant* must be treated as *confidential information*.

(l1) *AEMO* may charge a fee, except where the information is requested by a *Network Service Provider* under clause 3.13.3(l5), to recover all reasonable costs incurred in providing information to a *Registered Participant* under this clause 3.13.3.

(l2) For the purposes of clause 3.13.3(l), the provider of the model source code is:

(1) the *Generator* if the model source code was received from that *Generator* under clause S5.2.4(b)(6) or S5.2.4(d); or

(2) the person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, if the model source code was received from that person under clause S5.2.4(b)(6) or S5.2.4(d); or

(3) the *Generator*, if the model source code was provided to *AEMO* by a *Network Service Provider* and that same *Network Service Provider* advises *AEMO* that the provider of the model source code is the *Generator*; or

(4) the relevant *Network Service Provider*, if that same *Network Service Provider* advises *AEMO* that the provider of the model source code is itself; or

(5) otherwise, the relevant Transmission Network Service Provider.

(l3) If *AEMO* is required under clause 3.13.3(l) to provide information requested under clause 3.13.3(k)(2), *AEMO* may provide:

(1) historical information relating to the operating conditions of the *power system*;

(2) information and data provided to *AEMO* under clauses 3.13.3(f)(1) and 3.13.3(f)(3) and information of the same type provided under clause 3.13.3(g);

(3) *network* dynamic model parameter values obtained under clauses 3.13.3(f)(2) and 3.13.3(g);

(4) model parameter values and load flow data derived from a *releasable user guide*;

(5) a *network* model of the *national grid*, suitable for load flow and fault studies; and

(6) other technical data as listed in Schedules 5.5.3 and 5.5.4.

(l4) Despite clause 3.13.3(l), *AEMO* must not provide information relating to *plant* that is the subject of an *application to connect* or a *connection agreement*, until the later of:

(1) the date when the relevant *connection agreement* is executed; and

(2) three months before the proposed start of commissioning of that *plant*.

(l5) Subject to clause 3.13.3(l6), if a *Transmission Network Service Provider* is responsible for provision of *network* limit advice relating to *power system* stability limits to *AEMO* under clause S5.1.2.3, *AEMO* must, on request from that *Transmission Network Service Provider*, provide all *power system* and *generating system* model information that is reasonably required for planning and operational purposes, if *AEMO* holds that information, including:

(1) functional block diagram information, including information provided to *AEMO* under clause S5.2.4(b)(5);

(2) *generating unit*, *generating system* and *power system* static and dynamic model information, including model parameters and parameter values; and

(3) information provided to *AEMO* in accordance with clause S5.2.4(a).

(l6) If *AEMO* is required to provide information to a *Transmission Network Service Provider* under paragraph (l5), this must not include:

(1) model source code provided to *AEMO* under clauses S5.2.4(b)(6) and S5.2.4(d), except as allowed under clause 3.13.3(l); and

(2) information relating to *plant* that is the subject of an *application to connect* until after the execution of the relevant *connection agreement*.

(l7) Any information provided by *AEMO* under clause 3.13.3(l5) to a *Transmission Network Service Provider* must be treated as *confidential information*.

(m) Where special approvals or exemptions have been granted by *AEMO*, including approval to aggregate *generating units*, *market network services*, *loads* for *central dispatch*, or exemptions from *central dispatch*, details of such special arrangements must be *published* by *AEMO*.

(n) *AEMO* must determine and *publish intra-regional loss factors* in accordance with clause 3.6.2 by 1 April each year and whenever changes occur.

(o) *Network Service Providers* must advise *AEMO* of their *distribution loss factors*, duly authorised by the *AER*, and *AEMO* must *publish* such *distribution loss factors* in accordance with clause 3.6.3(i).

(p) *AEMO* must *publish* on a quarterly basis details of:

(1) *interconnector* transfer capability; and

(2) the discrepancy between *interconnector* transfer capability and the capacity of the relevant *interconnector* in the absence of *outages* on the relevant *interconnector* only,

for each day of the preceding quarter for all *interconnectors*.

(p1) *AEMO* must establish, maintain and *publish* a register which identifies:

(1) the *Registered Participant* to whom any information is provided under clause 3.13.3(l); and

(2) the date on which such information was provided.

Statement of opportunities

(q) By 31 August in each year, *AEMO* must prepare and *publish* at a reasonable charge to cover the cost of production, a *statement of opportunities*, including at least the following information for the subsequent 10 year period:

(1) projections of aggregate MW demand and *energy* requirements for each *region*;

(2) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation;

(3) planned *plant* retirements;

(4) a summary of *network capabilities* and *constraints* based upon *Annual Planning Reports*; and

(5) operational and economic information about the *market* to assist planning by:

(i) *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*; and

(ii) potential *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants*.

(r) If after the publication of the most recent *statement of opportunities*, significant new information becomes available to *AEMO* relating to:

(1) projections of aggregate MW demand and *energy* requirements for each *region*; or

(2) generating capabilities of existing *generating units* and *generating units* for which formal commitments have been made for construction or installation; or

(3) planned *plant* retirements,

AEMO must, as soon as practicable, *publish* that information in a descriptive form that is consistent with the *statement of opportunities*.

(s) *AEMO* may by written notice request a *jurisdictional planning body* to provide *AEMO* with information that *AEMO* requires for the preparation of a *statement of opportunities* and the *jurisdictional planning body* must comply with that notice.

(t) As soon as practicable after a *Scheduled Generator,Semi-Scheduled Generator Market Participant* or *Network Service Provider* becomes aware of any information required for *publication* by *AEMO* under paragraph (q), that information must be provided to *AEMO* by that *Scheduled Generator, Market Participant* or *Network Service Provider*.

(u) By 1 November each year, *AEMO* must prepare and provide a report to the *Reliability Panel* on:

(1) the accuracy of the demand forecasts to date in the most recent *statement of opportunities*; and

(2) any improvements made by *AEMO* or other relevant parties to the forecasting process that will apply to the next *statement of opportunities*.

(v) The *Reliability Panel* must *publish* each report provided to it under paragraph (u) within ten *business days* after being provided with that report.

(w) In relation to the *declared transmission system* of an *adoptive jurisdiction*:

(1) *AEMO* must maintain the register referred to in paragraph (d); and

(2) a *declared transmission system operator* must provide *AEMO* with information reasonably required by *AEMO* for maintaining the register and keeping it up to date.

(x) A *jurisdictional planning body* must provide assistance *AEMO* reasonably requests in connection with the preparation of a report under paragraph (u).

3.13.4 Spot market

(a) Each week, in accordance with the *timetable, AEMO* must *publish* details of the outcome of the *medium term PASA*.

(b) The details to be *published* by *AEMO* under clause 3.13.4(a) must include the information specified in clause 3.7.2(f).

(c) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of the outcome of the *short term PASA* for each *trading interval* covered.

(d) The details of the *short term PASA published* each *day* by *AEMO* under clause 3.13.4(c) must include the information specified in clause 3.7.3(h).

(e) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* a half hourly *pre-dispatch schedule* for the period described in clause 3.8.20(a).

(f) Details of the *pre-dispatch schedule* to be *published* must include the following for each *trading interval* in the period covered:

(1) forecasts of the most probable peak *power system load* plus required *scheduled reserve* for each *region* and for the total *power system*;

(2) forecasts of the most probable *energy* consumption for each *region* and for the total *power system*;

(3) forecast *inter-regional loss factors*;

(4) aggregate *generating plant* availability for each *region* and aggregate availability of each type of *market ancillary service* for each *region*;

(5) projected *supply* surpluses and deficits for each *region*, including shortages of *scheduled reserve* and projected *market ancillary service* surpluses and deficits for each *region*;

(5A) the aggregated MW allowance (if any) made by *AEMO* for generation from *non-scheduled generating systems* in each forecast:

(i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);

(ii) referred to in clause 3.13.4(f)(2);

(iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and

(iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*.

(5B) in respect of each forecast:

(i) of the most probable peak *power system load* referred to in clause 3.13.4(f)(1);

(ii) referred to in clause 3.13.4(f)(2);

(iii) of aggregate *generating plant* availability referred to in clause 3.13.4(f)(4); and

(iv) of projected *supply* surpluses and deficits referred to in clause 3.13.4(f)(5) but not including shortages of *scheduled reserve* or projected *market ancillary service* surpluses and deficits for each *region*,

a value that is the sum of that forecast and the relevant aggregated MW allowance (if any) referred to in clause 3.13.4(f)(5A); and

(6) identification and quantification of:

(i) when and where the projected conditions are found to be inadequate;

(ii) any *trading intervals* for which *low reserve* or *lack of reserve* conditions are forecast to apply;

(iii) where a projected *supply* deficit in one *region* can be supplemented by a surplus in a neighbouring *region* (dependent on forecast *interconnector* capacities) and the expected *interconnector flow*;

(iv) forecast *interconnector* transfer capabilities and the projected impact of any *inter-network tests* on those transfer capabilities; and

(v) when and where *network constraints* may become binding on the *dispatch* of *generation* or *load*.

(g) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* forecasts of *spot prices* and *ancillary service prices* at each *regional reference node* for each *trading interval* or *dispatch interval* (as applicable) of the period described in clause 3.8.20(a), with such forecasts being based on the *pre-dispatch schedule* information.

(h) Together with its forecast *spot prices*, *AEMO* must *publish* details of the expected sensitivity of the forecast *spot prices* to changes in the forecast *load* or *generating unit* availability.

(i) In accordance with the *timetable* or more often if there is a *change* in circumstances which in the opinion of *AEMO* results in a significant *change* in forecast *spot price*, or in any event no more than 3 hours after the previous such publication, *AEMO* must prepare and *publish* updated *pre-dispatch schedules* and *spot price forecasts*, including the details specified in clause 3.13.4(f).

(j) If *AEMO* considers there to be a significant change in a forecast *spot price*, *AEMO* must identify and *publish* the cause of such a change in terms of the aggregate *supply* and demand situation and any *network constraints* in or between the affected *region(s)*.

(k) *AEMO* must specify and *publish* its criteria for a significant change in forecast *spot price* for the purposes of activating an update in the *published* forecasts.

(l) Within 5 minutes of each time *AEMO* runs the *dispatch algorithm*, *AEMO* must *publish* the *dispatch price* for each *regional reference node* calculated in accordance with clause 3.9.2 and the *ancillary service price* for each *market ancillary service* for each *regional reference node* calculated in accordance with clause 3.9.2A.

(m) Within 5 minutes of the conclusion of each *trading interval, AEMO* must *publish* the *regional reference prices* for each *region* for that *trading interval*.

(n) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* the actual *regional reference prices*, *ancillary service prices*, *regional* and total *interconnected* system *loads* and *energies*, *inter-regional* flows, *inter-regional loss factors* and details of any *network constraints* for each *trading interval* in the previous *trading day*.

(o) Within 2 *business days* of an event whereby a *scheduled generating unit* or *semi-scheduled generating unit* has been *constrained off* or in the case of a *scheduled generating unit, constrained on*, in the *central dispatch* by a *network constraint* within its own *region*, *AEMO* must advise the *Scheduled Generator* or *Semi-Scheduled Generator* and *Network Service Provider*, with whom the relevant *Generator* has a *connection agreement* in respect of that *generating unit*, of the following information:

(1) the *dispatch intervals* in which the *constraint* applied; and

(2) *AEMO's* reasonable estimate of the MW quantities at which the *generating unit* would otherwise have been *dispatched* in each relevant *trading interval* in accordance with its *dispatch offer* and in the absence of the *network constraint*.

(p) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of final *dispatch offers*, *dispatch bids* and *market ancillary service offers* received and actual availabilities of *generating units*, *scheduled network services*, *scheduled loads* and *market ancillary services* for the previous *trading day*, including:

(1) the number and times at which *rebids* were made, and the reason provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* for each *rebid* under clause 3.8.22(c)(2);

(2) identification of the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* submitting the *dispatch bid, dispatch offer* or *market ancillary offer*;

(3) the *dispatch bid* or *dispatch offer prices*;

(4) quantities for each *trading interval*;

(5) the *ramp rate* of each *generating unit*, *scheduled load* and *scheduled network service* as measured by *AEMO's* telemetry system;

(6) identification of *trading intervals* for which the *plant* was specified as being *inflexible* in accordance with clause 3.8.19 and the reasons provided by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* in accordance with clause 3.8.19(b)(1);

(7) in respect of a *semi-scheduled generating unit*, the availability of that *generating unit* specified in the relevant *unconstrained intermittent generation forecast* for each *dispatch interval*; and

(8) in respect of *semi-scheduled generating units*, the aggregate of the availability of the *semi-scheduled generating units* referred to in subparagraph (7) in respect of each *region* for each *dispatch interval*.

(q) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of:

(1) actual *generation*, *dispatched generation*, *dispatched network service* or *dispatched load* for each *scheduled generating unit*, *semi-scheduled generating unit*, *scheduled network service* and *scheduled load* respectively in each *trading interval* and *dispatch interval*; and

(2) for each *semi-scheduled generating unit* in each *trading interval* and *dispatch interval*, whether or not a condition for setting a *semi-dispatch interval* applied,

for the previous *trading day*.

(r) Each *day*, in accordance with the *timetable*, *AEMO* must publish details of actual *generation* for each *non-scheduled generating unit* or *non-scheduled generating system*, in each *trading interval* for the previous *trading day*.

(s) Where *AEMO publishes* details as referred to in clause 3.13.4(r), the requirement to *publish* applies only to data available to *AEMO*.

(t) *AEMO* may, in *publishing* the details referred to in clause 3.13.4(s), *publish* aggregated information of actual *generation* for *non-scheduled generating units* or *non-scheduled generating systems* that have a *nameplate rating* that is less than 30 MW.

(u) Each time *AEMO* runs the *dispatch algorithm* it must, within 5 minutes, *publish* for the relevant *dispatch interval*:

(1) details of any MW allowance made by *AEMO* for *generation* from *non-scheduled generating systems* in its forecast regional demand;

(2) for each *regional reference node* the sum of the actual *generation* for each *non-scheduled generating unit* or *non-scheduled generating system*; and

(3) for each *regional reference node*, a value that is the sum of the *regional* demand value used by *AEMO* in its *dispatch algorithm* to calculate the *dispatch price* referred to in clause 3.13.4(l) and the sum of the actual *generation* referred to in clause 3.13.4(u)(2).

(v) Where *AEMO publishes* the information referred to in clause 3.13.4(u), the requirement for *AEMO* to *publish* applies only to data available to *AEMO*.

(w) Each *day*, in accordance with the *timetable*, *AEMO* must *publish* details of any operational irregularities arising on the previous *trading day* including, for example, any circumstances in which there was prima facie evidence of a failure to follow *dispatch instructions*.

(x) Each *trading interval*, *AEMO* must, for each *regional reference node*, *publish* the demand for that *trading interval*, both inclusive and exclusive of the aggregate actual *generation* from *non-scheduled generating systems*.

(y) In accordance with the *timetable* and no more than 3 hours after the last such notification, *AEMO* must notify electronically on a confidential basis each *Semi-Scheduled Generator* of the *unconstrained intermittent generation forecast* for its *semi-scheduled generating units* that was taken into account for each *trading interval* of the last *pre-dispatch schedule published* by *AEMO* under paragraph (e).

3.13.4A Market ancillary services

(a) *AEMO* must each *day*, in accordance with the *timetable*, *publish* a forecast of the requirements for each type of *market ancillary service* for each *region* for each *trading interval* during the period described in clause 3.8.20(a).

(b) *AEMO* must *publish* information describing the key factors which determine the requirement for each type of *market ancillary service* and how they impact on forecast requirements.

(c) *AEMO* must *publish* information detailing any significant changes to the forecast requirement for any *market ancillary service* previously *published* under clause 3.13.4A(a), as soon as reasonably practicable after becoming aware of that information.

3.13.5 Ancillary services contracting by AEMO

(a) *AEMO* must *publish* annually the costs of all of its operations associated with the acquisition of *market ancillary services* and *non-market ancillary services.*

(b) *AEMO* must *publish* annually the quantities and categories of *non-market ancillary services* covered under existing *ancillary services agreements* and the additional quantities of *non-market ancillary services* for which *AEMO* expects to enter into *ancillary services agreements* within the ensuing 12 months.

(c) Information published under clauses 3.13.5(a) or (b) must include:

(1) the costs and quantities associated with each category of *ancillary service* purchased or to be purchased; and

(2) where possible, the *regions* in respect of which costs were or are expected to be incurred and *ancillary services* were or are expected to be provided.

3.13.5A Settlement residue auctions

(a) If *AEMO* conducts an *auction* under rule 3.18, *AEMO* must, as soon as practicable thereafter, make available to all *Registered Participants* a report outlining:

(1) the *auction* clearing prices;

(2) all bids (but not the name of any bidder); and

(3) the proceeds of each such *auction*.

(b) *AEMO* must, as soon as practicable after the *final statements* for a *billing period* have been given to *Market Participants* under clause 3.15.15, make available to all *Registered Participants* a report setting out:

(1) the total *settlements residue*;

(2) the amount of *settlements residue* attributable to each *directional interconnector* (including the amount paid pursuant to the *jurisdictional derogations* in Chapter 9); and

(3) the amount of *settlement residue* attributable to *intra-regional loss factors* for each *region*, for that *billing period*.

(c) *AEMO* may provide copies of its reports under clauses 3.13.5A(a) and (b) to persons other than *Registered Participants*, and may charge a fee for doing so to cover an appropriate share of the costs of preparing the report.

3.13.6 [Deleted]

3.13.6A Report by AEMO

(a) *AEMO* must, as soon as reasonably practicable after issuing a *direction*, *publish* a report outlining:

(1) the circumstances giving rise to the need for the *direction*;

(2) the basis on which it determined the latest time for that *direction* and on what basis that it determined that a *market* response would not have avoided the need for the *direction*;

(3) details of the changes in *dispatch* outcomes due to the *direction*;

(4) the processes implemented by *AEMO* to issue the *direction*;

(5) if applicable, the basis upon which *AEMO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the issuance of the *direction*;

(6) if applicable, the basis upon which *AEMO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(b);

(7) details of the adequacy and effectiveness of responses to inquiries made by *AEMO* under clause 4.8.5A(d); and

(8) information regarding any notification by a *Registered Participant* that it will not be able to comply with a *direction* under clause 4.8.9(d).

(b) As soon as reasonably practicable after *AEMO* has, in accordance with clause 3.15.10C, included the amounts arising from a *direction* in a settlement statement provided under clause 3.15.15, *AEMO* must *publish* details of:

(1) the *compensation recovery amount* arising from the *direction* as calculated under clause 3.15.8(a) for the period of the *direction*;

(2) details of the calculation of the regional benefit determined under clause 3.15.8(b1); and

(3) a breakdown of the *compensation recovery amount* by each category of *Registered Participant*, as determined by *AEMO*, in each *region*.

3.13.7 Monitoring of significant variation between forecast and actual prices by AER

(a) The *AER* must, after consulting with the *AEMC*, specify and make available to *Registered Participants* and the public, criteria which the *AER* will use to determine whether there is a significant variation between the *spot price forecast published* by *AEMO* in accordance with clause 3.13.4 and the actual *spot price* in any *trading interval*. The *AER* must, in accordance with these criteria, monitor in each *trading interval* whether any such significant variation has occurred.

(b) The *AER* must prepare and *publish* a report in respect of each three month period commencing on 1 January, 1 April, 1 July and 1 October in each year. The report must:

(1) be *published* no later than 4 weeks after the end of each three month period;

(2) identify and review each occasion when, in accordance with the criteria specified under clause 3.13.7(a), the *AER* considers that a significant price variation has occurred;

(3) state why the *AER* considers that the significant price variation occurred;

(4) be available to members of the public on request; and

(5) be provided to the *AEMC*.

(c) The *ACCC* or the *AEMC* may request the *AER* to report to it on a particular *market* outcome. If the *ACCC* or the *AEMC* makes a request of this type, the *AER* may provide a report on that *market* outcome. The report must review the *market* outcome raised by the *ACCC* or the *AEMC* (as the case may be) and state why the *AER* considers that the *market* outcome occurred.

(d) The *AER* must, within 20 *business days* of the end of a week in which the *spot price* exceeded $5,000/MWh in a *trading interval* or *trading intervals*, prepare and *publish* a report which must for each *trading interval* in which the *spot price* exceeded $5,000/MWh in that week:

(1) describe the significant factors that contributed to the *spot price* exceeding $5,000/MWh, including the withdrawal of *generation* capacity and *network* availability;

(2) assess whether *rebidding* pursuant to clause 3.8.22 contributed to the *spot price* exceeding $5,000/MWh; and

(3) identify the marginal *scheduled generating units* and *semi-scheduled generating units* for the *dispatch intervals* in the relevant *trading interval* and all *scheduled generating units* and *semi-scheduled generating units* for which any *dispatch offer* for the *trading interval* was equal to or greater than $5,000/MWh and compare these *dispatch offers* to relevant *dispatch offers* in previous *trading intervals*.

(e) Where

(1) prices at a *regional reference node* for a *market ancillary service* over a period significantly exceed the relevant *spot price* for *energy;* and

(2) prices for that *market ancillary service* exceed $5,000 for a number of *trading intervals* within that period,

the *AER* must prepare and *publish* a report which:

(3) describes the significant factors that contributed to the *market ancillary service* prices exceeding $5,000/MWh;

(4) identifies any linkages between *spot prices* in the *energy market* and *market ancillary service* prices contributing to the occurrence; and

(5) assesses whether *rebidding* pursuant to clause 3.8.22 contributed to prices exceeding $5,000/Mwh.

3.13.8 Public information

(a) *AEMO* must *publish* on a daily basis the following information for the previous *trading day*:

(1) *regional reference price* by *trading interval*;

(2) *power system load* for each *region* referred to the *regional reference node* by *trading interval*;

(3) *regional* electricity consumption in MWh by *trading interval*;

(4) *inter-regional* power flows by *trading interval*; and

(5) *inter-regional* and *intra-regional network constraints* by *trading interval*.

(b) All *market information* that *AEMO* is required to *publish* in accordance with the *Rules* shall also be made available by *AEMO* to persons other than *Registered Participants* using the *electronic communications system* on the fee basis described in clause 8.7.6. *AEMO* may make the *market information* available to persons other than *Registered Participants* using a mechanism other than the *market information bulletin board* on the fee basis described in clause 8.7.6, so long as that information is also available on the *market information bulletin board*.

(c) *AEMO* must make available for purchase by any party the *statement of opportunities* from the date of *publication* of such statement.

(d) *AEMO* must retain all information provided to it under the *Rules* for at least 6 years in whatever form it deems appropriate for reasonably easy access.

3.13.9 [Deleted]

3.13.10 Market auditor

(a) *AEMO* must appoint one or more *market auditors* to carry out *reviews* of such matters as *AEMO* considers appropriate which must include (but need not be limited to) a *review* of:

(1) the calculations and allocations performed by the *metering system* and *settlements* system;

(2) the billing and information systems;

(3) the scheduling and *dispatch* processes;

(4) the processes for software management;

(5) the *AEMO* procedures and their compliance with the *Rules*.

(b) *AEMO* must ensure that the *market auditor* carries out the *reviews* to be carried out under clause 3.13.10(a) no less than annually.

(c) A *market auditor* shall be an *independent person*.

(d) A *market auditor* must report in writing to *AEMO*. *AEMO* must, after receiving the report, either:

(1) approve the report, and any recommendations made in it, by noting such approval on the report or in a paper attached to the report; or

(2) prepare a separate report setting out the matters dealt with in the report which *AEMO* approves and those matters which *AEMO* does not approve and setting out *AEMO's* reasons for that view.

(e) *AEMO* must *publish* any report received from the *market auditor* together with the material mentioned in clause 3.13.10(d).

3.13.11 [Deleted]

3.13.12 NMI Standing Data

(a) The authority responsible for administering the *jurisdictional electricity legislation* in for each *participating jurisdiction* may provide *AEMO* with a *Jurisdictional NMI Standing Data schedule* setting out the categories of *NMI Standing Data* which:

(1) *Registered Participants* are required by the *participating jurisdiction's* legislation or licensing requirements to provide to *AEMO* in relation to *connection points* in that *participating jurisdiction*; and

(2) *AEMO* must make available to *Market Customers*, or a class of *Market Customers*, on request pursuant to its disclosure obligations under clauses 3.13.12(d) and (e).

Any such schedule must contain the matters set out in clause 3.13.12(c).

(b) A responsible authority may from time to time amend the *Jurisdictional NMI Standing Data schedule* in respect of the relevant *participating jurisdiction*, which amendments must be consistent with the matters set out in clause 3.13.12(c), and must promptly provide the amended schedule to *AEMO*.

(c) A valid *Jurisdictional NMI Standing Data schedule* must contain the following items:

(1) a specification of the categories of *NMI Standing Data* which *AEMO* must provide to *Market Customers*, or a specified class of *Market Customers*, on request, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e), in respect of *connection points* in the relevant *participating jurisdiction*;

(2) details of the *Jurisdictional NMI Standing Data suppliers*, including which *Registered Participants* are required to provide that data in respect of particular *connection points* within that *participating jurisdiction*;

(3) the timetable which the relevant *participating jurisdiction* will implement to ensure *Jurisdictional NMI Standing Data suppliers* supply *NMI*

Standing Data in respect of *connection points* in that *participating jurisdiction* to *AEMO*;

(4) the criteria which *AEMO* must use to identify whether *AEMO* must disclose *NMI Standing Data* for *connection points* in that *participating jurisdiction* to particular *Market Customers*, pursuant to its disclosure obligations under clauses 3.13.12(d) and (e);

(5) the purposes connected with the facilitation of the wholesale electricity *market* for which the *Market Customer* may use *NMI Standing Data*;

(6) any additional information or criteria as may be determined by the authority responsible for administering the *jurisdictional electricity legislation* as necessary or appropriate in relation to the obligations of *Jurisdictional NMI Standing Data suppliers* and the release by *AEMO* of *NMI Standing Data* for *connection points* in that *participating jurisdiction*.

(d) *AEMO* must:

(1) *publish* the *Jurisdictional NMI Standing Data schedules* and any amendments to those schedules provided to it by the responsible authorities under clauses 3.13.12(a) and (b); and

(2) subject to clause 3.13.12(e), make available to *Market Customers* on request *NMI Standing Data* within the relevant categories in respect of *connection points* in a *participating jurisdiction* described in the *Jurisdictional NMI Standing Data schedule* for that *participating jurisdiction.*

(e) *AEMO* must only provide *NMI Standing Data* under this clause 3.13.12 to a *Market Customer*:

(1) that is a *Market Customer* or a member of a class of *Market Customers* fitting the criteria stated in the relevant *Jurisdictional NMI Standing Data schedule* as being entitled to receive that data;

(2) in accordance with the relevant valid *Jurisdictional NMI Standing Data schedule*; and

(3) for the purposes described in clause 3.13.12(g).

(f) Each *Registered Participant* which is a *Jurisdictional NMI Standing Data supplier* must provide the *NMI Standing Data* to *AEMO* which it is required to provide in accordance with the relevant *Jurisdictional NMI Standing Data schedule*, if any such *Jurisdictional NMI Standing Data schedule* has been provided to *AEMO* under clause 3.13.12(a):

(1) at no charge and in the format reasonably required by *AEMO*; and

(2) after having first done whatever may be required or otherwise necessary under any applicable privacy legislation (including if appropriate making relevant disclosures or obtaining relevant consents from end-use

customers) taking into account that *AEMO* will use and disclose the *NMI Standing Data* in accordance with the *Rules*.

(g) *Market Customers* must only use *NMI Standing Data* provided to it by *AEMO* under this clause 3.13.12 for the purposes permitted by the relevant *Jurisdictional NMI Standing Data schedule*.

(h) Where a responsible authority has provided *AEMO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Registered Participant* which is a *Jurisdictional NMI Standing Data supplier* fails to provide *AEMO* with *NMI Standing Data* in accordance with clause 3.13.12(f) and *AEMO* becomes aware of that failure, then:

(1) *AEMO* must advise the *Registered Participant* that, in its opinion, the *Registered Participant* is failing to comply with clause 3.13.12(f);

(2) if the *Registered Participant* fails to provide *AEMO* with the *NMI Standing Data* within 5 *business days* of the notice provided under clause 3.13.12(h)(1), *AEMO* must notify the *AER* and the relevant responsible authority of the failure and the failure by the *Registered Participant* to provide the *NMI Standing Data* is to be dealt with by the responsible authority under the relevant *participating jurisdiction's* legislation or licensing requirements unless the responsible authority notifies *AEMO* otherwise in accordance with clause 3.13.12(h)(3); and

(3) if, after receiving a notice from *AEMO* under clause 3.13.12(h)(2), the responsible authority notifies *AEMO* that the relevant *participating jurisdiction's* legislation or licensing requirements do not contain a regime which empowers the responsible authority to compel the *Registered Participant* to provide the *NMI Standing Data* to *AEMO*, *AEMO* must notify the *AER* of the failure by the *Registered Participant* to provide the *NMI Standing Data* under clause 3.13.12(f).

(i) Where a responsible authority has provided *AEMO* with a *Jurisdictional NMI Standing Data schedule* for the relevant *participating jurisdiction* and a *Market Customer*, that has been provided with *NMI Standing Data* by *AEMO* under clause 3.13.12(d) in accordance with that schedule, fails to use that *NMI Standing Data* in accordance with clause 3.13.12(g), and *AEMO* becomes aware of that failure, then:

(1) *AEMO* must advise the *Market Customer* that, in its opinion, the *Market Customer* is failing to comply with clause 3.13.12(g);

(2) if the *Market Customer* does not remedy the failure within 5 *business days* of the notice provided under clause 3.13.12(i)(1), *AEMO* must notify the relevant responsible authority of the failure and the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with this clause 3.13.12 is to be dealt with by the responsible authority under the relevant *participating jurisdiction's* legislation or licensing requirements unless the responsible authority notifies *AEMO* otherwise in accordance with clause 3.13.12(i)(3); and

(3) if, after receiving a notice from *AEMO* under clause 3.13.12(i)(2), the responsible authority notifies *AEMO* that the relevant *participating jurisdiction's* legislation or licensing requirements do not contain a regime which empowers the responsible authority to regulate the use of the *NMI Standing Data* by a *Market Customer*, *AEMO* must notify the *AER* of the failure by the *Market Customer* to use the *NMI Standing Data* in accordance with clause 3.13.12(g).

(j) *AEMO* must if requested by a responsible authority:

(1) develop a regime for monitoring and reporting to the responsible authority on requests received by *AEMO* to provide *NMI Standing Data* to *Market Customers* for *connections points* in the relevant *participating jurisdiction*, in consultation with the responsible authority; and

(2) provide information to the responsible authority in accordance with the monitoring and reporting regime developed under this clause 3.13.12(j).

(k) Nothing in this clause 3.13.12:

(1) requires *AEMO* to make available *NMI Standing Data* if that *NMI Standing Data* has not been provided to *AEMO*;

(2) requires *AEMO* to make available *NMI Standing Data* where the collection, use or disclosure of that information by *AEMO* would breach applicable privacy laws;

(3) precludes *AEMO* from providing *NMI Standing Data* to a *Registered Participant* where the provision of that information is required to give effect to other provisions of the *Rules*;

(4) precludes *AEMO* from disclosing *confidential information* in the circumstances in which the disclosure of *confidential information* is permitted under the *National Electricity Law* or these *Rules*; and

(5) requires *AEMO* to provide information which its software systems cannot provide without modification.

3.13.13 Inter-network tests

(a) *AEMO* must *publish* the *test program* for an *inter-network test* as soon as practicable after determining it under clause 5.7.7(r).

(b) If *AEMO* amends the *test program* for an *inter-network test* it must *publish* details of the amendment.

(c) If *AEMO* proposes to conduct an *inter-network test* it must *publish* the approximate time of the test, giving as much notice as is reasonably practicable.

(d) If the time of an *inter-network test* is changed, *AEMO* must *publish* details of the change.

3.14 Administered Price Cap and Market Suspension

3.14.1 Cumulative Price Threshold and Administered Price Cap

(a) In conjunction with each *participating jurisdiction*, and after consulting *Market Participants* in accordance with the *Rules consultation procedures*, the *AEMC* must develop, authorise and *publish* and may vary from time to time a schedule to specify an *administered price cap* for each *region* to apply to *spot prices* and *market ancillary service prices* and to be used as described in this rule 3.14.

(b) The *administered floor price* for each *region* to apply to *spot prices* and to be used as described in clause 3.14.2 will be the negative of the value of the *administered price cap*.

(c) The *cumulative price threshold* is $150,000 prior to 1 July 2010. Effective from 1 July 2010, the *cumulative price threshold* is $187,500.

3.14.2 Application of Administered Price Cap

(a) **[Deleted]**

(b) *AEMO* must immediately notify all *Market Participants* of the commencement and closing of an *administered price period* under rule 3.14.

(c) A *trading interval* is to be an *administered price period* if in a *region*:

(1) the sum of the *spot price* in the previous 336 *trading intervals,* calculated as if this clause did not apply, exceeds the *cumulative price threshold;*

(1A) the sum of the *ancillary service price* for a *market ancillary service* in the previous 2016 *dispatch intervals,* calculated as if this clause did not apply, exceeds 6 times the *cumulative price threshold*;

(2) the *trading interval* occurs in a *trading day* in which a prior *trading interval* is an *administered price period* under this clause 3.14.2; or

(3) the previous *trading interval* was an *administered price period* and in *AEMO*'s opinion one or more *trading intervals* in the next *business day* will be an *administered price period* and *AEMO* deems, with the consent of the *AER*, the *trading interval* to be an *administered price period.*

(d) During an *administered price period* the procedures for *PASA*, *dispatch, spot price* and *ancillary service price* determination are to continue in accordance with the provisions of the *Rules*.

(d1) If, within an *administered price period* triggered because of clauses 3.14.2(c)(1), (2) or (3) in relation to *energy*, the *dispatch price* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d1) did not apply:

(1) exceeds the *administered price cap*, then *AEMO* must set the *dispatch price* to the *administered price cap*; or

(2) is less than the *administered floor price*, *AEMO* must set the *dispatch price* to the *administered floor price*.

(d2) If within an *administered price period* an *ancillary service price* for a *market ancillary service* for the *region* identified in clause 3.14.2(c) calculated as if this clause 3.14.2(d2) did not apply exceeds the *administered price cap*, then *AEMO* must set that *ancillary service price* to the *administered price cap*.

(e) If during an *administered price period* the *dispatch price*:

(1) **[Deleted]**

(2) at any *regional reference node* is set to the *administered price cap* under clause 3.14.2, the *dispatch prices* at all other *regional reference nodes connected* by a *regulated interconnector* or *regulated interconnectors* that have an *energy* flow towards that *regional reference node* must not exceed the product of the *administered price cap* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *administered price cap* determined in accordance with clause 3.14.2(e)(5).

(3) **[Deleted]**

(4) at any *regional reference node* is set to the *administered floor price* under clause 3.14.2, then *dispatch prices* at all other *regional reference nodes connected* by a *regulated interconnector* or *regulated interconnectors* that have an *energy* flow towards that *regional reference node* must be equal to or greater than the product of the *administered floor price* multiplied by the average *loss factor* for that *dispatch interval* between that *regional reference node* and the *regional reference node* at which *dispatch prices* have been set to the *administered floor price* determined in accordance with clause 3.14.2(e)(5).

(5) *AEMO* must determine the average *loss factors* applicable to clause 3.14.2(e)(2) and 3.14.2(e)(4) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.14.3 Conditions for suspension of the spot market

(a) Subject to clause 3.14.3(b), *AEMO* may declare the *spot market* to be suspended in a *region* when in respect of that *region*:

(1) the *power system* has collapsed to a *black system*;

(2) *AEMO* has been directed by a *participating jurisdiction* to suspend the *market* or operate all or part of the *power system* in a manner contrary to the provisions of the *Rules* following the formal declaration by that *participating jurisdiction* of a state of emergency under its emergency services or equivalent legislation; or

(3) *AEMO* determines that it is necessary to suspend the *spot market* in a *region* because it has become impossible to operate the *spot market* in accordance with the provisions of the *Rules*.

(a1) If *AEMO* declares the *spot market* to be suspended in a *region*, then all *spot prices* and *ancillary service prices* are set in accordance with clause 3.14.5 for that *region*.

(b) *AEMO* must not suspend the *spot market* solely because:

(1) *spot prices* have reached the *market price cap*;

(1A) *spot prices* have reached the *market floor price*;

(2) *AEMO* has issued a *direction*; or

(3) *AEMO* has otherwise intervened in the market under rule 3.12.

(c) *AEMO* must conduct reviews of each occasion when it suspended the *spot market* in order to assess the adequacy of the provision and response of *facilities* or services, and the appropriateness of actions taken to restore or maintain *power system security*.

(d) The report of the review carried out in accordance with clause 3.14.3(c) must be made available to *Registered Participants* and the public.

(e) A *Registered Participant* must co-operate in any such review conducted by *AEMO* (including making available relevant records and information).

(f) A *Registered Participant* must provide to *AEMO* such information relating to the performance of its equipment during and after a suspension of the *spot market* as *AEMO* reasonably requires for the purposes of analysing or reporting on that suspension.

(g) *AEMO* must provide to a *Registered Participant* such information or reports relating to the performance of that *Registered Participant's* equipment during a suspension of the *spot market* as that *Registered Participant* reasonably requests and in relation to which *AEMO* is required to conduct a review under this clause 3.14.3.

3.14.4 Declaration of market suspension

(a) The *spot market* can only be suspended by a declaration by *AEMO* under clause 3.14.3(a) and if the *spot market* is suspended, *AEMO* must notify all *Registered Participants* without delay.

(b) *AEMO* must not declare the *spot market* to be suspended retrospectively.

(c) The *spot market* is to be deemed to be suspended at the start of the *trading interval* in which *AEMO* makes a declaration that the *spot market* is suspended.

(d) Following a declaration by *AEMO* under clause 3.14.3(a), the *spot market* is to remain suspended until *AEMO* declares and informs all *Registered Participants*:

(1) that *spot market* operation is to resume in accordance with this Chapter 3; and

(2) of the *time* at which the *spot market* is to resume.

(e) If *AEMO* declares that the *spot market* is suspended:

(1) *AEMO* may then issue *directions* to *Registered Participants* in accordance with clause 4.8.9; and

(2) *spot prices* and *ancillary service prices* are to be set by *AEMO* in accordance with clause 3.14.5.

(f) *AEMO* must within 10 *business days* following the day on which, in accordance with the notice given by *AEMO* under clause 3.14.4(d), the *spot market* resumed, commence an investigation of that *spot market* suspension.

(g) The investigation must examine and report on the reason for the suspension and the effect that the suspension had on the operation of the *spot market*. *AEMO* must make a copy of the report available to *Registered Participants* and the public as soon as it is practicable to do so.

3.14.5 Pricing during market suspension

(a) If *AEMO* declares that the *spot market* is suspended then, as far as *AEMO* considers it practically and reasonably possible, it must follow the procedures in the *Rules* for *PASA*, *dispatch* and *spot price* and *ancillary service price*, subject to the application of clause 3.14.5.

(b) The *spot price* and the *ancillary service price* during a *trading interval* for which *AEMO* has declared the *spot market* to be suspended is to be determined by *AEMO* in accordance with clause 3.14.5.

(c) Subject to clauses 3.14.5(d), (g) and (j), if the *spot market* is suspended in a *region* then *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *region* where the *spot market* is suspended are to continue in accordance with rules 3.8 and 3.9.

(d) If at any time on or during suspension of the *spot market* in a *region*:

(1) in *AEMO's* reasonable opinion it is not possible to continue *dispatch* and the determination of *spot prices* in the *suspended region* in accordance with rules 3.8 and 3.9;

(2) the *suspended region* is *connected* by an *unconstrained interconnector* to another *region*;

(3) the *dispatch* and determination of *spot prices* and *ancillary service prices* in the other *region* is continuing in accordance with rules 3.8 and 3.9; and

(4) *local market ancillary service requirements* do not apply in the *suspended region*,

AEMO must:

(5) determine the *spot price* in the *suspended region* in accordance with clause 3.14.5(e); and

(6) continue to determine *ancillary service prices* in the *suspended region* in accordance with rules 3.8 and 3.9.

(e) In the circumstances described in clause 3.14.5(d) the *spot price* is to be determined by application of an appropriate *inter-regional loss factor* to the *spot price* in the adjacent *region* referred to in clause 3.14.5(d)(2), such *inter-regional loss factor* being determined by *AEMO* in accordance with the methodology in clause 3.6.2A and the actual flows on the relevant *unconstrained interconnectors*.

(f) If the *spot price* in the *suspended region* is being determined in accordance with clause 3.15.4(e), the *spot price* must continue to be determined in accordance with that clause until the earlier of:

(1) the time that the *spot market* is no longer suspended in the *region*; and

(2) the time that the spot price in the region is required to be determined in accordance with either clause 3.14.5(g) or clause 3.14.5(j).

(g) If at any time during suspension of the *spot market* in a *region*:

(1) either:

(A) *dispatch* and the determination of *spot prices* and *ancillary service prices* is being effected in accordance with rules 3.8 and 3.9; or

(B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.14.5(e); and

(2) in *AEMO's* reasonable opinion it is no longer practical to continue *dispatch* and the determination of *spot prices* and *ancillary service prices* in the *suspended region* in accordance with the clauses under which *dispatch*, *spot prices* and *ancillary service prices* are currently being determined; and

(3) in *AEMO's* reasonable opinion a current *pre-dispatch schedule* exists in respect of the *suspended region*,

then *AEMO* must determine the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with clause 3.14.5(h).

(h) In the circumstances described in clause 3.14.5(g), the *spot prices* and *ancillary service prices* in the *suspended region* are set at *AEMO's* forecast *regional reference price* and *ancillary service prices* determined in accordance with the most recently *published pre-dispatch schedule* if it is still current.

(i) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(h), they must continue to be determined in accordance with that clause until the earlier of:

(1) the time that the *spot market* is no longer suspended in the relevant *region*; and

(2) the time that the *spot prices* or the *ancillary service prices* (as the case may be) in the *suspended region* are determined in accordance with clause 3.14.5(j).

(j) If at any time on or during suspension of the *spot market* in a *region*:

(1) either:

(A) *dispatch* and the determination of *spot prices* and *ancillary service prices* is being effected in accordance with rules 3.8 and 3.9; or

(B) the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with either clause 3.14.5(e) or clause 3.14.5(h); and

(2) in *AEMO's* reasonable opinion it is no longer practical to set the *spot prices* and *ancillary service prices* in the *suspended region* in accordance with either clauses rules 3.8, 3.9, clause 3.14.5(e) or clause 3.14.5(h) (as the case may be),

then *AEMO* must set the *spot prices* and *ancillary service prices* in the *suspended region* at the prices set out in the relevant market suspension pricing schedule developed and published in accordance with clause 3.14.5(l).

(k) If the *spot prices* and *ancillary service prices* in the *suspended region* are being determined in accordance with clause 3.15.4(j), they must continue to be determined in accordance with that clause until the *spot market* is no longer suspended in that *region*.

(l) *AEMO* must:

(1) develop in accordance with the *Rules consultation procedures* a methodology to be used by *AEMO* (**estimated price methodology**) to prepare and update schedules containing reasonable estimates of typical *market* prices during the periods to which the schedules relate (**estimated price schedules**);

(2) develop and update estimated price schedules in accordance with the estimated price methodology and that set out *AEMO's* reasonable estimate of typical *market* prices during periods in which the *spot market* is suspended; and

(3) *publish* the estimated price methodology promptly after it has been developed and *publish* the estimated price schedule at least 14 days prior to the first day to which the schedule relates.

(m) If a *spot price* is set in accordance with clause 3.14.5(g) or clause 3.14.5(j) at a *regional reference node* (**suspension node**), *spot prices* at all other *regional reference nodes connected* by an *interconnector* that has an actual flow towards the suspension node must not exceed the *spot price* in the *suspended*

region multiplied by the average *loss factor* between that *regional reference node* and the *suspension node* for that *trading interval*.

(n) *AEMO* must use reasonable endeavours to ensure that any adjustments required to *regional reference prices* so that they do not exceed the limits set by clause 3.14.5(m) are finalised as soon as practicable but in any event by no later than one *business day* following the day on which the *spot market* in the *region* ceased to be suspended.

(o) *AEMO* must calculate the average *loss factor* applicable to clause 3.14.5(m) by reference to the *inter-regional loss factor* equations relating to the relevant *regulated interconnector*.

3.14.6 Compensation due to the application of an administered price, market price cap or market floor price

(a) *Scheduled Generators* may claim compensation from *AEMO* in respect of *generating units* if, due to the application of an *administered price cap* during either an *administered price period* or *market suspension*, the resultant *spot price* payable to *dispatched generating units* in any *trading interval* is less than the price specified in their *dispatch offer* for that *trading interval*.

(a1) A *Scheduled Network Service Provider* may claim compensation from *AEMO* in respect of a *scheduled network service* if, due to the application of an *administered price cap*, the *market price cap*, the *market floor price* or an *administered floor price*, the resultant revenue receivable in respect of *dispatched network services* in any *trading interval* is less than the minimum requirement specified by its *network dispatch offer* for that *trading interval.*

(a2) A *Market Participant* which submitted a *dispatch bid* may claim compensation from *AEMO* in respect of a *scheduled load* if, due to the application of an *administered floor price* during either an *administered price period* or *market suspension*, the resultant *spot price* in any *trading interval* is greater than the price specified in the *dispatch bid* for that *trading interval*.

(a3) In respect of an *ancillary service generating unit* or an *ancillary service load*, a *Market Participant* may claim compensation from *AEMO* if, due to the application of an *administered price cap*, the resultant *ancillary service price* for that *ancillary service generating unit* or *ancillary service load* in any *dispatch interval* is less than the price specified in the relevant *market ancillary service offer*.

(b) Notification of an intention to make a claim under paragraphs (a), (a1), (a2) or (a3) must be submitted to both *AEMO* and the *AEMC* within 5 *business days* of the *trading interval* in which *dispatch prices* were adjusted in accordance with clause 3.9.5 or notification by *AEMO* that an *administered price period* or period of *market suspension* has ended.

(c) The *AEMC* must, in accordance with the *transmission consultation procedures*, develop and *publish* guidelines ('compensation guidelines') that:

(1) identify the objectives of the payment of compensation under this clause as being to maintain the incentive for:

(i) *Scheduled Generators*, *Scheduled Network Service Providers* and other *Market Participants* to invest in *plant* that provides services during peak periods; and

(ii) *Market Participants* to supply *energy* and other services during an *administered price period*;

(2) require the amount of compensation payable in respect of a claim under this clause to be based on:

(i) the costs directly incurred by the claimant due to the application of the *administered price cap*, the *market price cap*, the *market floor price* or the *administered floor price* (as the case may be); and

(ii) the value of any opportunities foregone by the claimant due to the application of the *administered price cap*, the *market price cap*, the *market floor price* or the *administered floor price* (as the case may be);

(3) outline the methodology to be used to calculate the amount of any compensation payable in respect of a claim under this clause, including the methodology for calculating the costs referred to in clause 3.14.6(c)(2)(i) and the value of opportunities foregone referred to in clause 3.14.6(c)(2)(ii); and

(4) set out the information *AEMO* and a claimant must provide to enable a panel established under paragraph (g) to make a recommendation as to compensation under this clause and to enable the *AEMC* to make a determination as to compensation under this clause.

(d) The *AEMC* must request the *Adviser* to establish a three member panel from the group of persons referred to in clause 8.2.2(e) and such other persons as the *Adviser* may choose to appoint under clause 8.2.6A(i) to assist the *AEMC* to develop the compensation guidelines.

(e) The *AEMC* must *publish* the first compensation guidelines by 30 June 2009 and there must be such guidelines in place at all times after that date.

(f) The *AEMC* may from time to time, in accordance with the *transmission consultation procedures*, amend or replace the compensation guidelines.

(g) Following its receipt of a notification under paragraph (b), the *AEMC* must request the *Adviser* to establish a three member panel from the group of persons referred to in clause 8.2.2(e) and such other persons as the *Adviser* may choose to appoint under clause 8.2.6A(i) to make recommendations to the *AEMC* as to whether:

(1) compensation should be payable by *AEMO* in relation to the claim; and

(2) if so, the amount of compensation that should be paid.

(h) The panel must, as soon as practicable but not later than:

(1) 30 *business days* after receiving the information required to be provided to it under the compensation guidelines, give to the *AEMC* a report that sets out its draft recommendations as to the matters referred to in paragraph (g); and

(2) 20 *business days* after the closing date for submissions on that report, give to the *AEMC* a report that sets out its final recommendations as to the matters referred to in paragraph (g).

(i) Not later than 20 *business days* after receiving a report referred to in subparagraph (h)(1), the *AEMC* must *publish*:

(1) that report;

(2) its draft decision as to the matters referred to in paragraph (g); and

(3) an invitation for written submissions to be made to the *AEMC* on that report and the *AEMC's* draft decision.

(j) Any person may make a written submission to the *AEMC* on the report referred to in subparagraph (h)(1) and the *AEMC's* draft decision within the time specified in the invitation referred to in subparagraph (i)(3), which must not be earlier than 20 *business days* after the invitation is *published*.

(k) In preparing a report that sets out its final recommendations, the panel must take into account the submissions made in response to the invitation referred to in subparagraph (i)(3).

(l) In preparing a report under paragraph (h), the panel must apply the compensation guidelines.

(m) In making its draft decision as to the matters referred to in paragraph (g), the *AEMC* must take into account the draft recommendations of the panel.

(n) Not later than 15 *business days* after receiving a report referred to in subparagraph (h)(2), the *AEMC* must *publish*:

(1) that report; and

(2) its final decision as to the matters referred to in paragraph (g).

(o) In making its final decision as to the matters referred to in paragraph (g), the *AEMC* must take into account:

(1) the final recommendations of the panel; and

(2) the submissions made in response to the invitation referred to in subparagraph (i)(3).

(p) In making a draft or final decision under this clause, the *AEMC* must apply the compensation guidelines unless it is satisfied that there are compelling reasons not to do so.

(q) The *AEMC* may recover from a claimant for compensation under this clause any costs that are incurred by the *AEMC* and the panel in carrying out their functions under this clause in respect of that claim. For this purpose the *AEMC* may require the claimant to pay all or a proportion of those costs to the *AEMC* prior to the claim being considered or determined.

3.15 Settlements

3.15.1 Settlements management by AEMO

(a) *AEMO* must facilitate the billing and settlement of payments due in respect of *transactions* under this Chapter 3, including:

(1) *spot market transactions*;

(2) *reallocation transactions*; and

(3) ancillary services transactions under clause 3.15.6A.

(b) *AEMO* must determine the *Participant fees* and the *Market Participants* must pay them to *AEMO* in accordance with the provisions of rule 2.11.

3.15.2 Electronic funds transfer

(a) *AEMO* must ensure that an electronic funds transfer (EFT) facility is provided and made available for all *Market Participants* for the purposes of *settlements* and the collection and payment of all *market* fees.

(b) Unless otherwise authorised by *AEMO*, all *Market Participants* must use the EFT facility provided by *AEMO* under clause 3.15.2(a) for the payment and receipt of amounts due in respect of *transactions* and the payment of *market* fees.

(c) In establishing the EFT facility in accordance with clause 3.15.2(a) *AEMO* must use its reasonable endeavours to ensure that the use of that facility does not impose unnecessary restrictions on the normal banking arrangements of *Market Participants*.

3.15.3 Connection point and virtual transmission node responsibility

(a) For each *market connection point* there is one person that is *financially responsible* for that *connection point*. The person that is *financially responsible* for such a *connection point* is:

(1) the *Market Participant* which has classified the *connection point* as a *market load*;

(2) the *Market Participant* which has classified the *generating unit connected* at that *connection point* as a *market generating unit*; or

(3) the *Market Participant* which has classified the *network service connected* at that *connection point* as a *market network service*.

(b) For each *virtual transmission node* there is one person that is *financially responsible* for that *virtual transmission node*. The person that is *financially responsible* for such a *virtual transmission node* is the *Market Participant* which is the *Local Retailer* for all of the *market connection points* assigned to that *virtual transmission node.*

3.15.4 Adjusted energy amounts - connection points

Where a *connection point* is not a *transmission network connection point*, the *adjusted gross energy* amount for that *connection point* for a *trading interval* is calculated by the following formula:

AGE = ME x DLF

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network connection point* to which the *connection point* is assigned and negative value where the flow is in the other direction); and

DLF is the *distribution loss factor* applicable at that *connection point*.

3.15.5 Adjusted energy - transmission network connection points

Where a *connection point* is a *transmission network connection point*, the *adjusted gross energy* amount for that *connection point* for a *trading interval* is calculated by the following formula:

AGE = ME - AAGE

where:

AGE is the *adjusted gross energy* amount to be determined;

ME is the amount of electrical *energy*, expressed in MWh, flowing at the *connection point* in the *trading interval*, as recorded in the *metering data* in respect of that *connection point* and that *trading interval* (expressed as a positive value where the flow is towards the *transmission network*, and negative value where the flow is in the other direction); and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *transmission network connection point*, for which a *Market Participant* (other than a suspended *Market Participant*) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.5A Adjusted energy – virtual transmission nodes

For each *virtual transmission node*, the *adjusted gross energy* amount for that *virtual transmission node* for a *trading interval* is calculated by the following formula:

AGE = - AAGE

where:

AGE is the *adjusted gross energy* amount to be determined; and

AAGE is the aggregate of the *adjusted gross energy* amounts for that *trading interval* for each *connection point* assigned to that *virtual transmission node* for which a *Market Participant* (other than a suspended *Market Participant*) is *financially responsible* (and in that aggregation positive and negative *adjusted gross energy* amounts are netted out to give a positive or negative aggregate amount).

3.15.6 Spot market transactions

(a) In each *trading interval*, in relation to each *connection point* and to each *virtual transmission node* for which a *Market Participant* is *financially responsible*, a *spot market transaction* occurs, which results in a *trading amount* for that *Market Participant* determined in accordance with the formula:

TA= AGE x TLF x RRP

where

TA is the *trading amount* to be determined (which will be a positive or negative dollar amount for each *trading interval*);

AGE is the *adjusted gross energy* for that *connection point* or *virtual transmission node* for that *trading interval*, expressed in MWh;

TLF for a *transmission network connection point* or *virtual transmission node*, is the *intra-regional loss factor* at that *connection point* or *virtual transmission node* respectively, and for any other *connection point*, is the *intra-regional loss factor* at the *transmission network connection point* or *virtual transmission node* to which it is assigned in accordance with clause 3.6.3(a); and

RRP is the *regional reference price* for the *regional reference node* to which the *connection point* or *virtual transmission node* is assigned, expressed in dollars per MWh.

(b) *AEMO* is entitled to the *trading amount* resulting from a *AEMO intervention event* and, for the purposes of determining *settlement amounts*, any such *trading amount* is not a *trading amount* for the relevant *Market Participant*.

(c) A *Directed Participant* is entitled to the *trading amount* resulting from any service, other than the service the subject of the *AEMO intervention event*, rendered as a consequence of that event.

3.15.6A Ancillary service transactions

(a) In each *trading interval,* in relation to each *enabled ancillary service generating unit* or *enabled ancillary service load*, an ancillary services transaction occurs, which results in a *trading amount* for the relevant *Market Participant* determined in accordance with the following formula:

$$TA = \text{the aggregate of } \frac{EA \times ASP}{(12)} \text{ for each } \textit{dispatch interval} \text{ in a } \textit{trading interval}$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a positive number);
EA (in MW)	=	the amount of the relevant *market ancillary service* which the *ancillary service generating unit* or *ancillary service load* has been *enabled* to provide in the *dispatch interval*; and
ASP (in $ per MW per hour)	=	the *ancillary service price* for the *market ancillary service* for the *dispatch interval* for the *region* in which the *ancillary service generating unit* or *ancillary service load* has been *enabled*.

(b) In each *trading interval,* in relation to each *Market Participant* which provides *non-market ancillary services* under an *ancillary services agreement,* an ancillary services transaction occurs, which results in a *trading amount* for the relevant *Market Participant* determined in accordance with that agreement.

(c) In each *trading interval*, in relation to each *Market Customer*, an ancillary services transaction occurs, which results in a *trading amount* for the *Market Customer* determined in accordance with the following formula:

$$TA = TNCASP \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
TNCASP (in $)	=	all amounts payable by *AEMO* in respect of the *trading interval* under *ancillary services agreements* in respect of the provision of *NCAS*;
TCE (in MWh)	=	the *customer energy* for the *Market Customer* for the *trading interval*; and
ATCE (in MWh)	=	the aggregate *customer energy* figures for all *Market Customers* for the *trading interval*.

(d) In each *trading interval*, in relation to each *Market Generator,* an ancillary services transaction occurs, which results in a *trading amount* for the *Market Generator* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TGE}{ATGE} \times -1$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
TSRP (in $)	=	the total of all amounts payable by *AEMO* in respect of the *trading interval* under *ancillary services agreements* in respect of the provision of *system restart ancillary services*;
TGE (in MWh)	=	the *generator energy* for the *Market Generator* for the *trading interval*; and
ATGE (in MWh)	=	the aggregate of the *generator energy* figures for all *Market Generators* for the *trading interval*.

(e) In each *trading interval*, in relation to each *Market Customer,* an ancillary services transaction occurs, which results in a *trading amount* determined in accordance with the following formula:

$$TA = \frac{TSRP}{2} \times \frac{TCE}{ATCE} \times -1$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
TSRP (in $)	=	has the meaning given in clause 3.15.6A(d);
TCE (in MWh)	=	the *customer energy* for the *Market Customer* for the *trading interval*; and
ATCE (in MWh)	=	the aggregate of the *customer energy* figures for all *Market Customers* for the *trading interval*.

(f) The total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast raise service, slow raise service* or *delayed raise service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *AEMO* must:

(1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast raise service, slow raise service* or *delayed raise service* between *global market ancillary services requirements* and *local market ancillary service requirement* pro-rata to the respective marginal prices for each such service;

(2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring each *local market ancillary service requirement* for all *regions*, as determined pursuant to clause 3.15.6A(f)(1); and

(3) allocate for each relevant *dispatch interval* the sum of the costs of the *global market ancillary service requirement* and each *local market ancillary service requirement* calculated in clause 3.15.6A(f)(2) to each *region* as relevant to that requirement pro-rata to the aggregate of the *generator energy* for the *Market Generators* in each *region* during the *trading interval*.

For the purpose of this clause 3.15.6A(f) *RTCRSP* is the sum of:

(i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3)*;* and

(ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(f)(3).

In each *trading interval*, in relation to each *Market Generator* in a given *region*, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* determined in accordance with the following formula:

$$TA = RTCRSP \times \frac{TGE}{RATGE} \times -1$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
RTCRSP (in $)	=	the total of all amounts calculated by *AEMO* as appropriate to recover from the given *region* as calculated in this clause 3.15.6A(f) for the *fast raise service, slow raise service* or *delayed raise service* in respect of *dispatch intervals* which fall in the *trading interval*;
TGE (in MWh)	=	the *generator energy* figures for the *Market Generator* in that *region* for the *trading interval*; and
RATGE (in MWh)	=	the aggregate of the *generator energy* figures for all *Market Generators* in that *region* for the *trading interval*.

(g) The total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated

to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b). *AEMO* must:

(1) allocate for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *AEMO* under clause 3.15.6A(a) for each of the *fast lower service*, *slow lower service* or *delayed lower service* between *global market ancillary service requirements* and *local market ancillary service requirement* pro rata to the respective marginal prices of each such service;

(2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring each *local market ancillary service requirement* for all *regions*, as determined pursuant to clause 3.15.6A(g)(1); and

(3) allocate for each relevant *dispatch interval* the sum of the costs of the *global market ancillary service requirement* and each *local market ancillary service requirement* calculated in clause 3.15.6A(g)(2) to each *region* as relevant to that requirement pro-rata to the aggregate of the *customer energy* figures for all *Market Customers* in each *region* during the *trading interval*.

For the purpose of this clause 3.15.6A(g) *RTCLSP* is the sum of:

(i) the *global market ancillary service requirement* cost for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3); and

(ii) all *local market ancillary service requirement* costs for that *region*, for all *dispatch intervals* in the relevant *trading interval*, as determined pursuant to clause 3.15.6A(g)(3).

In each *trading interval*, in relation to each *Market Customer* in a given *region,* an ancillary services transaction occurs, which results in a *trading amount* for that *Market Customer* determined in accordance with the following formula:

$$TA = RTCLSP \times \frac{TCE}{RATCE} \times -1$$

where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
RTCLSP (in $)	=	the total of all amounts calculated by *AEMO* as appropriate to recover from the given *region* as calculated in this clause 3.15.6A(g) for the *fast lower service, slow lower service* or *delayed lower service* in respect of *dispatch intervals* which fall in the *trading interval*;
TCE (in MWh)	=	the *customer energy* for the *Market Customer* in that *region* for the *trading interval*; and

RATCE (in MWh) = the aggregate of the *customer energy* figures for all *Market Customers* in that *region* for the *trading interval*.

(h) The total amount calculated by *AEMO* under paragraph (a) for the *regulating raise service* or the *regulating lower service* in respect of each *dispatch interval* which falls within the *trading interval* must be allocated by *AEMO* to each *region* in accordance with the following procedure and the information provided under clause 3.9.2A(b):

(1) allocate on a pro-rata basis for each *region* and for each *dispatch interval* within the relevant *trading interval* the proportion of the total amount calculated by *AEMO* under paragraph (a) for the *regulating raise service* and *regulating lower service* between *global market ancillary service requirements* and *local market ancillary service requirements* to the respective marginal prices for each such service; and

(2) calculate for each relevant *dispatch interval* the sum of the costs of acquiring the *global market ancillary service requirements* for all *regions* and the sum of the costs of acquiring *local market ancillary service requirements* for all *regions*, as determined under subparagraph (1).

(i) In each *trading interval* in relation to:

(1) each *Market Generator* or *Market Customer* which has *metering* to allow their individual contribution to the aggregate deviation in *frequency* of the *power system* to be assessed, an ancillary services transaction occurs, which results in a *trading amount* for that *Market Generator* or *Market Customer* determined in accordance with the following formula:

$$TA = PTA \times -1$$

and

$$PTA = \text{the aggregate of} \left(TSFCAS \times \frac{MPF}{AMPF} \right)$$

for each *dispatch interval* in the *trading interval* for *global market ancillary service requirements* and *local market ancillary service requirements* where:

TA (in $) = the *trading amount* to be determined (which is a negative number);

TSFCAS (in $) = the total of all amounts calculated by *AEMO* under paragraph (h)(2) for the *regulating raise service* or the *regulating lower service* in respect of a *dispatch interval*;

MPF (a number) = the contribution factor last set by *AEMO* for the *Market Generator* or *Market*

Customer, as the case may be, under paragraph (j) for the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*; and

AMPF (a number)	=	the aggregate of the MPF figures for all *Market Participants* for the *dispatch interval* for the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*.

or

(2) in relation to each *Market Customer* for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1), an ancillary services transaction occurs, which results in a trading amount for that *Market Customer* determined in accordance with the following formula:

$$TA = PTA \times -1$$

and

$$PTA = \text{the aggregate of } \left(TSFCAS \times \frac{MPF}{AMPF} \times \frac{TCE}{ATCE} \right)$$

for each *dispatch interval* in the *trading interval* for *global market ancillary service requirements* and *local market ancillary service requirements* where:

TA (in $)	=	the *trading amount* to be determined (which is a negative number);
TSFCAS (in $)	=	has the meaning given in subparagraph (1);
MPF (a number)	=	the aggregate of the contribution factor set by *AEMO* under paragraph (j) for *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1) for the *region* or *regions* relevant to the *regulating raise service* or the *regulating lower service*;
AMPF (a number)	=	the aggregate of the MPF figures for all *Market Participants* for the *dispatch interval* for the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*;
TCE (in MWh)	=	the *customer energy* for the *Market Customer* for the *trading interval* in the *region* or *regions* relevant to the *regulating raise service* or *regulating lower service*; and
ATCE (in MWh)	=	the aggregate of the *customer energy* figures for

all *Market Customers*, for whom the *trading amount* is not calculated in accordance with the formula in subparagraph (1), for the *trading interval* for the *region* or *regions* relevant to that *regulating raise service* or *regulating lower service*.

(j) *AEMO* must determine for the purpose of paragraph (i):

(1) a contribution factor for each *Market Participant*; and

(2) notwithstanding the estimate provided in paragraph (nb), if a *region* has or *regions* have operated asynchronously during the relevant *trading interval*, the contribution factors relevant to the allocation of *regulating raise service* or *regulating lower service* to that *region* or *regions*,

in accordance with the procedure prepared under paragraph (k).

(k) *AEMO* must prepare a procedure for determining contribution factors for use in paragraph (j) and, where *AEMO* considers it appropriate, for use in paragraph (nb), taking into account the following principles:

(1) the contribution factor for a *Market Participant* should reflect the extent to which the *Market Participant* contributed to the need for *regulation services*;

(2) the contribution factor for all *Market Customers* that do not have *metering* to allow their individual contribution to the aggregate need for *regulation services* to be assessed must be equal;

(3) for the purpose of paragraph (j)(2), the contribution factor determined for a group of *regions* for all *Market Customers* that do not have *metering* to allow the individual contribution of that *Market Customer* to the aggregate need for *regulation services* to be assessed, must be divided between *regions* in proportion to the total *customer energy* for the *regions*;

(4) the individual *Market Participant's* contribution to the aggregate need for *regulation services* will be determined over a period of time to be determined by *AEMO*;

(5) a *Registered Participant* which has classified a *scheduled generating unit*, *scheduled load, ancillary service generating unit* or *ancillary service load* (called a '**Scheduled Participant**') will not be assessed as contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval:*

(i) the Scheduled Participant achieves its *dispatch* target at a uniform rate;

(ii) the Scheduled Participant is *enabled* to provide a *market ancillary service* and responds to a control signal from *AEMO* to *AEMO's* satisfaction; or

(iii) the Scheduled Participant is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services* in a way which tends to reduce the aggregate deviation;

(6) where contributions are aggregated for *regions* that are operating asynchronously during the calculation period under paragraph (i), the contribution factors should be normalised so that the total contributions from any non-synchronised *region* or *regions* is in the same proportion as the total *customer energy* for that *region* or *regions*; and

(7) a *Semi-Scheduled Generator* will not be assessed as contributing to the deviation in the *frequency* of the *power system* if within a *dispatch interval*, the *semi-scheduled generating unit*:

(i) achieves its *dispatch level* at a uniform rate;

(ii) is *enabled* to provide a *market ancillary service* and responds to a control signal from *AEMO* to *AEMO's* satisfaction; or

(iii) is not *enabled* to provide a *market ancillary service*, but responds to a need for *regulation services*. (l)*AEMO* may amend the procedure referred to in clause 3.15.6A(j) from time to time.

(m) *AEMO* must comply with the *Rules consultation procedures* when making or amending the procedure referred to in clause 3.15.6A(k).

(n) *AEMO* must *publish*, in accordance with the *timetable*, the historical data used in determining a factor for each *Market Participant* for the purposes of clauses 3.15.6A(h) and (i) in accordance with the procedure contemplated by clause 3.15.6A(k).

(na) Notwithstanding any other provisions of the *Rules*, *AEMO* must *publish* the factors determined in accordance with clause 3.15.6A(j)(1) at least 10 *business days* prior to the application of those factors in accordance with clauses 3.15.6A(h) and 3.15.6A(i).

(nb) When a *region* is or *regions* are operating asynchronously, *AEMO* must *publish* (where appropriate in accordance with the procedure developed under paragraph (k)), an estimate of the contribution factors referred to in paragraph (j)(2) to be applied for information purposes only by *Market Participants* for the duration of the separation.

(o) In this clause 3.15.6A:

(1) '*generator energy*' in respect of a *Market Generator* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Generator's applicable connection points*, provided that, if the sum of those figures is negative, then the *Market Generator's generator energy* for that *trading interval* is zero;

(2) a *connection point* is an *applicable connection point* of a *Market Generator* if:

(A) the *Market Generator* is *financially responsible* for the *connection point*; and

(B) the *connection point connects* a market *generating unit* to the *national grid*;

(3) '*customer energy*' in respect of a *Market Customer* for a *trading interval* means the sum of the *adjusted gross energy* figures calculated for that *trading interval* in respect of that *Market Customer's relevant connection points*; and

(4) a *connection point* is a *relevant connection point* of a *Market Customer* if:

(A) the *Market Customer* is *financially responsible* for the *connection point*; and

(B) the *load* at that *connection point* has been classified (or is deemed to be classified) as a *market load*.

(p) When *AEMO* dispatches a quantity of *regulating raise service* or *regulating lower service* in addition to the quantity it determines in accordance with the *dispatch algorithm*, *AEMO* must:

(1) for the purposes of paragraphs (f) and (g), include the additional quantity in the cost of *delayed services*; and

(2) for the purposes of paragraphs (h) and (i), exclude the additional quantity in the cost of *regulation services*,

taking into account the requirements in clauses 3.8.1(a) and (b) to maximise the value of *spot market* trading.

3.15.7 Payment to Directed Participants

(a) Subject to clause 3.15.7(b), *AEMO* must pay compensation to *Directed Participants* calculated in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B, as the case may be, for any service which the *Directed Participant* was required to provide in order to comply with the *direction*.

(b) For the purpose of clause 3.15.8 and 3.15.10C the amount of compensation due to a *Directed Participant* pursuant to clause 3.15.7(a) must include interest on the sum of that amount less any payment made in accordance with clause 3.15.10C(a), computed at the average *bank bill rate* for the period beginning on the day on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the *billing period* in which the *direction* was issued and ending on the day on which payment is required to be made pursuant to clause 3.15.10C.

(c) Subject to clause 3.15.17(d) and clause 3.15.7B, the compensation payable to each *Directed Participant* for the provision of *energy* or *market ancillary services* pursuant to a *direction* is to be determined in accordance with the formula set out below:

DCP = AMP x DQ

where:

DCP = the amount of compensation the *Directed Participant* is entitled to receive;

AMP = the price below which are 90% of the *spot prices* or *market ancillary service prices* (as the case may be) for the relevant service provided by *Scheduled Generators*, *Semi-Scheduled Generators*, *Scheduled Network Service Providers* or *Market Customers* in the *region* to which the *direction* relates, for the 12 months immediately preceding the *trading day* in which the *direction* was issued; and

DQ = is either:

(A) the difference between the total *adjusted gross energy* delivered or consumed by the *Directed Participant* and the total *adjusted gross energy* that would have been delivered or consumed by the *Directed Participant* had the *direction* not been issued; or

(B) the amount of the relevant *market ancillary service* which the *Directed Participant* has been *enabled* to provide in response to the *direction.*

(d) If at the time *AEMO* issues a *direction*, the *Directed Participant* had submitted a valid *dispatch bid*, *dispatch offer* or *rebid* for *dispatch* of the service that is to be *dispatched* in accordance with the *direction*, the *Directed Participant* is entitled to receive compensation for the provision of that service at a price equal to the *price* in that *dispatch bid, dispatch offer* or *rebid* as appropriate.

(e) *AEMO* must, in accordance with the *intervention settlement timetable*, advise each *Directed Participant* in writing of the amount the *Directed Participant* is entitled to receive pursuant to clause 3.15.7(c) or clause 3.15.7(d).

3.15.7A Payment to Directed Participants for services other than energy and market ancillary services

(a) Subject to clause 3.15.7(d) and clause 3.15.7B, *AEMO* must compensate each *Directed Participant* for the provision of services pursuant to a *direction* other than *energy* and *market ancillary services*, at the fair payment price of the services determined in accordance with this clause 3.15.7A.

(b) Subject to clause 3.15.7A(e) and clause 3.15.7A(e1), *AEMO* must, in accordance with the *intervention settlement timetable* and any guidelines developed by *AEMO* in accordance with the *Rules consultation procedures*, determine if in *AEMO*'s reasonable opinion, an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period.

(b1) If *AEMO* determines pursuant to clause 3.15.7A(b) that an independent expert could reasonably be expected to determine a fair payment price for the services provided pursuant to the *direction* within a reasonable time period it must as

soon as reasonably practicable after making such determination *publish* its determination and, subject to clause 3.15.7A(e1), appoint an independent expert, in accordance with the *intervention settlement timetable*, to determine the fair payment price for the services provided pursuant to the *direction*.

(c) *AEMO* must include as part of the terms of appointment of an independent expert the following requirements:

(1) that the independent expert must, in determining the fair payment price of the relevant service for the purposes of clause 3.15.7A, take into account:

(i) other relevant pricing methodologies in Australia and overseas, including but not limited to:

(A) other electricity markets;

(B) other markets in which the relevant service may be utilised; and

(C) relevant contractual arrangements which specify a price for the relevant service;

(ii) the following principles:

(A) the disinclination of *Scheduled Generators, Semi-Scheduled Generators*, *Market Generators, Scheduled Network Service Providers* or *Market Customers* to provide the service the subject of the *direction* must be disregarded;

(B) the urgency of the need for the service the subject of the *direction* must be disregarded;

(C) the *Directed Participant* is to be treated as willing to supply at the market price that would otherwise prevail for the directed services the subject of the *direction* in similar demand and supply conditions; and

(D) the fair payment price is the market price for the directed services the subject of the *direction* that would otherwise prevail in similar demand and supply conditions;

(2) that the independent expert must determine and *publish* a draft report, in accordance with the *intervention settlement timetable*, setting out:

(i) a description of the services provided in response to the *direction*;

(ii) the independent expert's draft determination of each fair payment price for the services provided;

(iii) the methodology and assumptions used by the independent expert in making the draft determination of the fair payment price; and

(iv) a request for submissions from interested parties on the matters set out in the draft report;

(3) that the independent expert must, in accordance with the *intervention settlement timetable*, determine the fair payment price for the services provided, taking into account the submissions received, and must prepare and *publish* a final report setting out:

(i) the description of the services provided in response to the *direction*;

(ii) the independent expert's determination of the fair payment price for the services provided;

(iii) the methodology and assumptions used by the independent expert in making the determination of each fair payment price; and

(iv) summaries of the submissions made by interested parties;

(4) that the independent expert must deliver to *AEMO* a final tax invoice for the services rendered at the time he or she *publishes* the final report; and

(5) that a report *published* by the independent expert pursuant to clause 3.15.7A(c) must not disclose *confidential information* or the identity of a *Directed Participant*.

(d) In accordance with the *intervention settlement timetable*, *AEMO* must calculate the compensation payable to the *Directed Participant* using the fair payment price *published* by the independent expert under clause 3.15.7A(c)(3).

(e) The fair payment price determined in accordance with clause 3.15.7A(c)(3) is to be the fair payment price for that service to be applied in all future occurrences where there is a *direction* for that service at any time within a period of 12 calendar months from the date on which the determination of that price was published.

(e1) *AEMO* must not appoint an independent expert under clause 3.15.7A(b1) in respect of a *direction* for a service in respect of which:

(1) there is a determination of an independent expert in place in accordance with clause 3.15.7A(e) in relation to that service; or

(2) *AEMO* has appointed an independent expert to determine the fair payment price for that service under clause 3.15.7A and the independent expert has not yet made a determination of the fair payment price.

In these circumstances, *AEMO* must apply to the subsequent *direction* the fair payment price for that service determined, or to be determined, by the independent expert.

(f) Within 1 *business day* of calculating the compensation payable pursuant to clause 3.15.7A(a) by application of clause 3.15.7A(e) or pursuant to clause 3.15.7A(d), *AEMO* must advise the relevant *Directed Participant* in writing of the amount of compensation.

(g) The determination of a fair payment price pursuant to clause 3.15.7A(c)(1) and the calculation of compensation payable to *Directed Participants* pursuant to clause 3.15.7A(d) is final and binding.

3.15.7B Claim for additional compensation by Directed Participants

(a) Subject to clauses 3.15.7B(a1) and 3.15.7B(a4), a *Directed Participant* entitled to compensation pursuant to clause 3.15.7 or clause 3.15.7A may, in accordance with the *intervention settlement timetable,* make a written submission to *AEMO* claiming an amount equal to the sum of:

(1) the aggregate of the loss of revenue and additional net direct costs incurred by the *Directed Participant* in respect of a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled network services*, as the case may be, as a result of the provision of the service under *direction*; less

(2) the amount notified to that *Directed Participant* pursuant to clause 3.15.7(c) or clause 3.15.7A(f); less

(3) the aggregate amount the *Directed Participant* is entitled to receive in accordance with clause 3.15.6(c) for the provision of a service rendered as a result of the *direction.*

(a1) Subject to clause 3.15.7B(a4), if *AEMO* determines pursuant to clause 3.15.7A(a) that an independent expert could not reasonably be expected to determine within a reasonable period of time the relevant fair payment price, a *Directed Participant* may, in accordance with the *intervention settlement timetable*, make a written submission to *AEMO* claiming compensation from *AEMO* for the provision of services under the *direction* equal to:

(1) loss of revenue and additional net direct costs which the *Directed Participant* incurred as a result of the provision of services under the *direction*; and

(2) a reasonable rate of return on the capital employed in the provision of the service determined by reference as far as reasonably practicable to rates of return for the provision of similar services by similar providers of such services.

(a2) Subject to clause 3.15.7B(a4), if a *Directed Participant* entitled to compensation pursuant to clause 3.15.7(d) considers that the amount notified pursuant to clauses 3.15.7(e) is less than the amount it is entitled to receive pursuant to that clause, the *Directed Participant* may, in accordance with the *intervention settlement timetable*, make a written submission to *AEMO* requesting compensation from *AEMO* for that difference.

(a3) For the purposes of the calculation of additional net direct costs pursuant to paragraphs (a)(1) and (a1)(1), the additional net direct costs incurred by the *Directed Participant* in respect of that *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled network services* (as the case may be) includes without limitation:

(1) fuel costs in connection with the relevant *generating unit* or *scheduled network services*;

(2) incremental maintenance costs in connection with the relevant *generating unit* or *scheduled network services*;

(3) incremental manning costs in connection with the relevant *generating unit* or *scheduled network services*;

(4) acceleration costs of maintenance work in connection with the relevant *generating unit* or *scheduled network services,* where such acceleration costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*;

(5) delay costs for maintenance work in connection with the relevant *generating unit* or *scheduled network services*, where such delay costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*;

(6) other costs incurred in connection with the relevant *generating unit* or *scheduled network services*, where such costs are incurred to enable the *generating unit* or *scheduled network services* to comply with the *direction*; and

(7) any compensation which the *Directed Participant* receives or could have obtained by taking reasonable steps in connection with the relevant *generating unit* or *scheduled network services* being available.

(a4) In respect of a single *intervention price trading interval*, a *Directed Participant* may only make a claim pursuant to clauses 3.15.7B(a), 3.15.7B(a1) or 3.15.7B(a2) if the amount of the claim in respect of that *intervention price trading interval* is greater than $5,000.

(b) The submissions pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) must:

(1) itemise each component of a claim;

(2) contain sufficient data and information to substantiate each component of a claim for loss of revenue and additional direct costs incurred and the reasonable rate of return, as the case may be; and

(3) be signed by an authorised officer of the applicant certifying that the written submission is true and correct.

(c) *AEMO* must, in accordance with the *intervention settlement timetable*:

(1) refer an *affected participant's adjustment claim or market customer's additional claim* to an independent expert to determine such claim in accordance with clause 3.12.3 if the claim is equal to or greater than $20,000 and the *additional intervention claim* that includes that claim is equal to or greater than $100,000; and

(2) determine in its sole discretion if all other claims by a *Directed Participant* in respect of that *direction* pursuant to clauses 3.15.7B(a), 3.15.7B(a1) and 3.15.7B(a2) are reasonable and if so pay the amount claimed in accordance with clause 3.15.10C.

(d) If *AEMO* considers that a claim by a *Directed Participant* under clause 3.15.7B(a) or 3.15.7B(a1) or 3.15.7B(a2) is unreasonable, it must, in accordance with the *intervention settlement timetable*:

(1) advise the *Directed Participant* of its determination in writing, setting out its reasons; and

(2) refer the matter to an independent expert to determine the claim for compensation in accordance with clause 3.12.3.

3.15.8 Funding of Compensation for directions

(a) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate the "*compensation recovery amount*" being:

(1) the sum of:

(i) the total of the compensation payable to *AEMO* by *Affected Participants* and *Market Customers* under clause 3.12.2 in respect of a *direction* for the provision of *energy*; plus

(ii) the total of the amounts retained by *AEMO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of *energy*;

(2) less the sum of:

(i) the total of the compensation payable by *AEMO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 in respect of a *direction* for the provision of *energy*; plus

(ii) the total of the compensation payable by *AEMO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of *energy*; plus

(iii) the total amount payable by *AEMO* to the independent expert pursuant to clause 3.12.3(c).

(b) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate a figure for each *Market Customer* in each *region* applying the following formula:

$$MCP = \frac{E}{\Sigma E} \times \frac{RB}{\Sigma RB} \times CRA$$

where

MCP is the amount payable or receivable by a *Market Customer* pursuant to this clause 3.15.8(b);

E is the sum of the *Market Customer's adjusted gross energy* amounts at each *connection point* for which the *Market Customer* is *financially responsible* in a *region*, determined in accordance with clauses 3.15.4 and 3.15.5 in respect of the relevant *intervention price trading intervals* excluding any *loads* in respect of which the *Market Customer* submitted a *dispatch bid* for the relevant *intervention price trading interval* in that *region;* and

RB is the regional benefit determined by *AEMO* pursuant to clause 3.15.8(b1) at the time of issuing the *direction*.

CRA is the *compensation recovery amount*.

(b1) *AEMO* must, as soon as practicable following the issuance of a *direction*, determine the relative benefit each *region* received from the issuance of a *direction* in accordance with the *regional benefit directions procedures*.

(b2) *AEMO* must develop in accordance with the *Rules consultation procedures* a procedure to determine the relative benefit each *region* receives from the issuance of a *direction* (the "*regional benefit directions procedures*"). Such procedures must take into account, where applicable to the reason the *direction* was given, the *load* at risk of not being supplied if the *direction* were not issued or the extent of improvement in available *energy* reserve in the *region,* capability to control *voltage* in the *region*, and capability to control *power system frequency* within the *region* and any other relevant matters.

(c) If the figure calculated for a *Market Customer* under clause 3.15.8(b) is negative, the absolute value of that amount is the amount payable by the *Market Customer* to *AEMO* pursuant to clause 3.15.8(b).

(d) Subject to clause 3.15.22, if the figure calculated for a *Market Customer* under clause 3.15.8(b) is positive, such amount is the amount receivable by the *Market Customer* from *AEMO* pursuant to clause 3.15.8(b), subject to the provisions of clause 3.15.22.

(e) *AEMO* must, in accordance with the *intervention settlement timetable*, calculate for each *ancillary service* the subject of a *direction*, the "*ancillary service compensation recovery amount*" being:

(1) the sum of:

(i) the total of the compensation payable to *AEMO* by *Affected Participants* and *Market Customers* under clause 3.12.2 in respect of a *direction* for the provision of that *ancillary service*; plus

(ii) the total of the amounts retained by *AEMO* pursuant to clause 3.15.6(b) in respect of a *direction* for the provision of that *ancillary service*;

(2) less the sum of:

(i) the total of the compensation payable by *AEMO* to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 in

respect of a *direction* for the provision of that *ancillary service*; plus

(ii) the total of the compensation payable by *AEMO* to *Directed Participants* pursuant to clause 3.15.7(a) in respect of a *direction* for the provision of that *ancillary service*; plus

(iii) the total amount payable by *AEMO* to the independent expert pursuant to clause 3.12.3(c), if the *direction* the subject of the independent expert's determination was with respect to that *ancillary service*.

(f) The *trading amount* must be calculated as follows:

(1) subject to clause 3.15.8(f)(2) and (3) *AEMO* must use the appropriate formula set out in clause 3.15.6A(c), (d), (e), (f), (g), (h) or (i) depending on which *ancillary service* was the subject of the *direction*;

(2) TNCASP, TSRP, TCRSP, TCLSP or TSFCAS (as applicable) in the relevant formula is equal to the *ancillary service compensation recovery amount* for the relevant *ancillary service* in respect of the *direction*; and

(3) if TCE, TGE, ATCE or ATGE is used in the relevant formula, then the words 'the *trading interval'* in the definitions of those terms in the formula are to be read as 'all of the *trading intervals* during which the *direction* applied'.

(g) Any compensation payable by *AEMO* pursuant to clauses 3.12.2 and 3.15.7 not recovered pursuant to clauses 3.15.8(b) and 3.15.8(e) must be recovered from *Registered Participants* in the same proportion as the largest single fixed component of *Participants fees*.

3.15.9 Reserve settlements

(a) *AEMO's* costs incurred in contracting for the provision of *reserves* are to be met by fees imposed on *Market Customers* in accordance with this clause 3.15.9.

(b) Included in the statements to be provided under clauses 3.15.14 and 3.15.15, *AEMO* must give each *Market Participant* a statement setting out:

(1) the aggregate of the amounts payable by *AEMO* under *reserve contracts* in respect of the relevant *billing period*;

(2) any amounts determined as payable by *AEMO*:

(i) by the independent expert under clause 3.12.3; or

(ii) as a result of a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* being *dispatched* or *generating units* or *loads* under an *unscheduled reserve contract* being *activated*,

in respect of the relevant *billing period*; and

(3) the aggregate of the amounts receivable by *AEMO* under the *Rules* in respect of *reserve contracts* during the relevant *billing period*.

(c) Separate statements must be provided under paragraph (b):

(1) for *reserve contracts* entered into by *AEMO* specifically in respect of the *Market Participant's region* in accordance with paragraph (d)*;* and

(2) for *reserve contracts* other than those entered into for and allocated to a specific *region* or *regions*.

(d) Where either:

(1) without the intervention in the *market* of *AEMO* a *region* would otherwise, in *AEMO's* reasonable opinion, fail to meet the minimum *power system security and reliability standards*; or

(2) a *region* requires a level of *power system reliability* or *reserves* which, in *AEMO's* reasonable opinion, exceeds the level required to meet the minimum *power system security and reliability standards*,

then *AEMO* must recover its net liabilities, or distribute its net profits, under the terms of *reserve contracts* entered into to meet these requirements, from or to the *Market Customers* in that *region* in accordance with paragraph (e).

(e) In respect of *reserve contracts* entered into by *AEMO, AEMO* must calculate in relation to each *Market Customer* for each *region* in respect of each *billing period* a sum determined by applying the following formula:

$$MCP = \frac{E \text{ x } RRC}{\Sigma \text{ E}}$$

where:

MCP is the amount payable by a *Market Customer* for a *region* in respect of a *billing period;*

E is the sum of all that *Market Customer's adjusted gross energy amounts* in a *region* (the **"relevant *region*"**) in each *trading interval* which occurs between 0800 hours and 2000 hours (*EST*) on a *business day* in the *billing period* excluding any *loads* in that *region* in respect of which the *Market Customer* submitted a *dispatch bid* for any such *trading interval;*

RRC is the total amount payable by *AEMO* under *reserve contracts* which relate to the relevant *region* in the *billing period* as agreed under clause 3.20.3(f); and

$\sum$E is the sum of all amounts determined as "E" in accordance with this paragraph (e) in respect of that *region.*

(f) A *Market Customer* is liable to pay *AEMO* an amount equal to the sum calculated under paragraph (e) in respect of that *Market Customer*.

(g) Operational and administrative costs incurred by *AEMO* in arranging for the provision of *reserves*, other than its liabilities under the terms of the *reserve contracts* into which it has entered, are to be recovered by *AEMO* from all *Market Participants* as part of the fees imposed in accordance with rule 2.11.

(h) For the purposes of clause 3.15.19, a re-determination by a panel established under clause 3.12.2 is to be taken to be an agreement between *AEMO* and each of the *Market Participants* and *Scheduled Generators*.

3.15.10 Administered price, market price cap or market floor price compensation payments

(a) In the event that the *AEMC* awards compensation to a *Scheduled Generator, Market Participant* which submitted a *dispatch bid* or *Scheduled Network Service Provider* in accordance with clause 3.14.6, then *AEMO* must determine an amount which shall be payable by all *Market Customers* who purchased electricity from the *spot market* in a region in which the *regional reference price* was affected by the imposition of an *administered price* or the *market price cap*, or the *market floor price* in the *trading interval* or *trading intervals* in respect of which such compensation has been awarded.

(b) *AEMO* shall determine the amounts payable for each relevant *trading interval* by each of the affected *Market Customers* under clause 3.15.10(a) as follows:

$$\frac{APC \times E_i}{\Sigma E_i}$$

where

APC is the total amount of any compensation payments awarded by the *AEMC* to *Scheduled Generators, Market Participants* which submitted *dispatch bids* or *Scheduled Network Service Providers* in respect of that *trading interval* in accordance with clause 3.14.6.

E_i is the sum of all of the *Market Customer's adjusted gross energy* amounts, determined in accordance with clauses 3.15.4 and 3.15.5, in respect of each *trading interval* in the *billing period* and each *connection point* for which the *Market Customer* is *financially responsible* in any *region* or *regions* affected by the imposition of an *administered price* or the *market price cap* or the *market floor price*.

ΣE_i is the sum of all amounts determined as "E_i" in accordance with this clause 3.15.10 for all *Market Customers* in all *regions* affected by the imposition of an *administered price* or the *market price cap* or the *market floor price* in that *trading interval.*

(c) Within 15 *business days* of being notified by the AEMC that compensation is to be paid to a *Scheduled Generator, Market Participant* which submitted a *dispatch bid* or *Scheduled Network Service Providers* in accordance with clause 3.14.6, *AEMO* shall include in statements provided under clauses

3.15.14 and 3.15.15 separate details of any amounts payable by or to *Market Participants* as determined in accordance with this clause 3.15.10.

3.15.10A Goods and services tax

(a) In this clause 3.15.10A:

"GST" has the meaning given in the GST Act; and

"GST Act" means the *A New Tax System (Goods and Services Tax) Act 1999 (C'th)*;

"supply" and **"taxable supply"** each have the meaning given in the GST Act,

and the definition of "*supply*" in Chapter 10 does not apply.

(b) Despite anything else in the *Rules*, *Participant fees*, *spot prices,* adjustments for *directions*, *reserve settlements*, *administered price cap* compensation payments, system security *direction settlements*, *re-allocation transactions,* compensation, interest, *settlements residues*, *ancillary services settlements*, *settlements residue* distributions (including *auction* proceeds), *auction expense fees* and other prices, fees, charges and amounts payable to or by *AEMO*, the *AER* or the *AEMC* in respect of supplies under the *Rules* exclude GST. Accordingly:

(1) where a *Registered Participant* makes a taxable supply to *AEMO*, the *AER* or the *AEMC* under or in connection with the *Rules* on or after 1 July 2000, *AEMO*, the *AER* or the *AEMC* (as applicable) must also pay the *Registered Participant* making the supply an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate;

(2) where *AEMO*, the *AER* or the *AEMC* makes a taxable supply to a *Registered Participant* under the *Rules* on or after 1 July 2000, the *Registered Participant* must also pay *AEMO*, the *AER* or the *AEMC* (as applicable) an additional amount equal to the consideration payable for the supply multiplied by the applicable GST rate; and

(3) *AEMO* must include in *preliminary statements*, *final statements, routine revised statements, special revised statements,* statements and invoices issued under the *Rules* the additional amounts contemplated by clauses 3.15.10A(b)(1) and (2).

(c) However, if the additional amount paid or payable to a *Registered participant*, *AEMO*, the *AER* or the *AEMC* under clause 3.15.10A(b) in respect of a taxable supply differs from the actual amount of GST payable by or to the *Registered Participant*, *AEMO*, the *AER* or the *AEMC* (as applicable) under the GST Act in respect of the relevant supply, then adjustments must be made in accordance with clause 3.15.19 so as to ensure the additional amount paid under this clause in respect of the supply is equal to the actual amount of GST payable under the GST Act in respect of the supply.

3.15.10B Restriction contract amounts

(a) If clause 3.12A.7(g) applies then *AEMO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of amounts payable:

(1) by *Market Customers* in the relevant *region* in which the *mandatory restrictions* apply an amount equal to:

$$EMCP = RSA \quad \text{x} \quad \frac{(AGE)}{(AAGE)}$$

Where:

EMCP is the payment to be made by *Market Customers* to *AEMO*.

RSA is the *restriction shortfall amount*.

AGE is the *adjusted gross energy* of a *Market Customer* in that *region* for the *mandatory restriction period* expressed in MWh.

AAGE is the aggregate of the *adjusted gross energy* of all *Market Customers* in that *region* for the *mandatory restriction period* expressed in MWh;

(2) by *Scheduled Generators* and *Scheduled Network Service Providers* to *AEMO* in accordance with clause 3.12A.7(a); and

(3) the amounts payable by *AEMO* to the *Scheduled Generators* or *Scheduled Network Service Provide*rs pursuant to *accepted restriction offer*s.

(b) Immediately upon the later of the publication of the independent expert's final report in accordance with clause 3.12A.7(i)(8) and the determination of a *dispute resolution panel* pursuant to clause 3.12A.7(m), if any, *AEMO* must include in the next statements provided under clauses 3.15.14 and 3.15.15 separate details of any amounts payable:

(i) by a *Market Customer* equal to the amount as determined in accordance with clause 3.12A.7(g)(i) less the amount determined in accordance with clause 3.15.10B(a)(1), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b); and

(ii) to a *Market Customer* equal to the amount determined in accordance with clause 3.15.10B(a)(1) less the amount determined in accordance with clause 3.12A.7(g)(i), if such number is positive together with interest on such amount calculated by applying the *bank bill rate* on the date of this statement for the period from the date of the statement referred to in clause 3.15.10B(a) to the date of this statement under clause 3.15.10B(b).

(c) If clauses 3.12A.7(f) or 3.12A.7(h) apply then *AEMO* must include in the next statement provided under clauses 3.15.14 and 3.15.15 immediately after the end of the relevant *mandatory restriction period* separate details of any amounts payable:

(i) by or to *Market Customers* as determined in accordance with clauses 3.12A.7(e) or 3.12A.7(h) respectively;

(ii) by *Scheduled Generators* and *Scheduled Network Service Providers* to *AEMO* in accordance with clause 3.12A.7(a); and

(iii) the amounts payable by *AEMO* to the *Scheduled Generators* or *Scheduled Network Service Provide*rs pursuant to all *accepted restriction offer*s.

3.15.10C Intervention Settlements

(a) *AEMO* must include in the final statement provided under clause 3.15.14 and 3.15.15 for a *billing period* in which a *direction* was issued:

(1) for each *Affected Participant* and *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.12.2(c);

(2) for each *Directed Participant* in relation to that *direction* the amount calculated pursuant to clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be;

(3) for each *Market Customer* in relation to that *direction* the amount calculated pursuant to clause 3.15.8(b) by application of clause 3.15.8 mutatis mutandis provided that the amount for the purposes of:

(i) clause 3.15.8(a)(1)(i) shall be the total amount payable to *AEMO* by *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.2(c);

(ii) clause 3.15.8(a)(1)(ii) shall be the amount calculated in accordance with that clause;

(iii) clause 3.15.8(a)(2)(i) shall be the total amount payable by *AEMO* to *Affected Participants* and *Market Customers* calculated pursuant to clause 3.12.2(c);

(iv) clause 3.15.8(a)(2)(ii) shall be the sum of the total amount payable by *AEMO* to *Directed Participants* calculated pursuant to clause 3.15.7(c) and 3.15.7A(a) by application of 3.15.7A(e); and

(v) clause 3.15.8(a)(2)(iii) shall be zero; and

(4) for each *Market Customer* and *Market Generator* in relation to that *direction* an amount calculated pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *AEMO* for the

relevant *ancillary service* calculated in accordance with clause 3.15.7(c) or clause 3.15.7A(a) by application of clause 3.15.7A(e), as the case may be.

(b) *AEMO* must include in the first statement it provides under clauses 3.15.14 and 3.15.15 following a final determination of all total amounts payable or receivable by it pursuant to clause 3.12.2, clause 3.15.7(a) and clause 3.15.8, separate details of the amount:

(1) receivable by each *Directed Participant* pursuant to clause 3.15.7(a) less the amount, if any, paid to that *Directed Participant* pursuant to clause 3.15.10C(a)(2);

(2) receivable by each *Affected Participant* or *Market Customer* pursuant to clause 3.12.2:

(i) less the amount paid to that *Affected Participant* or *Market Customer*, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

(ii) plus the amount paid by that *Affected Participant* or *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;

(3) payable by each *Affected Participant* or *Market Customer* pursuant to 3.12.2:

(i) less the amount paid by that *Affected Participant* or *Market Customer*, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any; or

(ii) plus the amount paid to that *Affected Participant* or *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(1), if any;

(4) receivable by each *Market Customer* pursuant to clause 3.15.8(b):

(i) less the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or

(ii) plus the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;

(5) payable by each *Market Customer* pursuant to clause 3.15.8(b):

(i) less the amount paid by that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any; or

(ii) plus the amount paid to that *Market Customer* in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(3), if any;

(6) if an *Affected Participant* or *Market Customer* is not entitled to any compensation pursuant to clause 3.12.2, the amount:

(i) receivable by that person equal to the amount paid by that person pursuant to clause 3.15.10C(a); or

(ii) payable by that person equal to the amount paid to that person pursuant to clause 3.15.10C(a);

(7) payable by each *Market Customer* and *Market Generator* equal to:

(i) the amount payable by the *Market Customer* or *Market Generator*, as the case may be, pursuant to clause 3.15.8(e) by application of clause 3.15.8 mutatis mutandis provided that for the purposes of clause 3.15.8(f)(2) TNCASP, TSRP, TCRSP, TCLSP and TSFCAS shall be the total compensation payable by *AEMO* for the relevant *ancillary service* calculated in accordance with clause 3.15.7A(a); less

(ii) the amount paid by the *Market Customer* or *Market Generator*, as the case may be, in accordance with the statement issued to it pursuant to clause 3.15.10C(a)(4); and

(8) payable by *Registered Participants* pursuant to clause 3.15.8(g).

(c) If on application by the *AER* a court determines, in relation to a *direction*, that a *Directed Participant* has breached clause 4.8.9(c2) then:

(1) the *Directed Participant* shall not be entitled to, and must repay, any compensation plus interest pursuant to clauses 3.15.7, 3.15.7A and 3.15.7B, in relation to that *direction*; and

(2) the *AER* must forward to *AEMO* a written notice of the court's determination.

(3) *AEMO* must include in the first relevant statement it provides under clauses 3.15.14 and 3.15.15 following receipt of the notice from the *AER* issued pursuant to clause 3.15.10C(c)(2) separate details of:

(i) an amount payable to *AEMO* by the *Directed Participant* equal to the total compensation received by that *Directed Participant* in accordance with clauses 3.15.7, 3.15.7A and 3.15.7B plus interest on that total compensation computed at the average *bank bill* rate for the period from the date of payment of such amount to the *Directed Participant* until the date of that first statement;

(ii) an amount payable by *AEMO* to each relevant *Market Customer* calculated by applying clause 3.15.8(b) mutatis mutandis except that:

(A) MCP shall equal the amount receivable by the *Market Customer*; and

(B) CRA shall equal that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of *energy* by the *Directed Participant*; and

(iii) an amount payable by *AEMO* to each relevant *Market Customer* and *Market Generator* calculated by applying clause 3.15.8(f)(2) mutatis mutandis except that:

(A) all *trading amounts* determined by this clause 3.15.10C(c)(3)(iii) shall be positive; and

(B) TNCASP, TSRP, TCRSP, TCLSP, and TSFCAS shall all be an amount equal to that part of the amount, including interest, calculated pursuant to clause 3.15.10C(c)(3)(i) attributable to the provision of the relevant *ancillary service.*

3.15.11 Reallocation transactions

(a) A *reallocation transaction* is a *transaction* undertaken with the consent of two *Market Participants* and *AEMO*, under which *AEMO* credits one *Market Participant* with a positive *trading amount* in respect of a *trading interval*, in consideration of a matching negative *trading amount* debited to the other *Market Participant* in respect of the same *trading interval*.

(b) *Reallocation transactions* may be of any type permitted in the *reallocation procedures*.

(c) A *reallocation transaction* is initiated by a *reallocation request* lodged with *AEMO* by or on behalf of two *Market Participants*.

(d) A *reallocation request* must:

(1) contain the information required by the *reallocation procedures*; and

(2) be lodged with *AEMO* in accordance with the *reallocation procedures* and the timetable for *reallocation requests* as *published* by *AEMO* from time to time (the **reallocation timetable**).

(e) Upon receipt of a *reallocation request AEMO* must register the *reallocation request* within the time specified in the *reallocation procedures* and the reallocation timetable and may impose conditions on that registration as contemplated by the *reallocation procedures*.

(f) After a *reallocation request* has been registered in respect of two *Market Participants*, *AEMO* may deregister the *reallocation request* if:

(1) the *prudential requirements* are not satisfied by either of those *Market Participants*;

(2) either of the *Market Participants* fails to comply with any conditions imposed by *AEMO* in respect of the *reallocation request* at the time it was registered;

(3) both *Market Participants* notify *AEMO* in accordance with the *reallocation procedures* that they require the *reallocation request* to be terminated; or

(4) a *default event* occurs in respect of either of the *Market Participants* and *AEMO* exercises its powers under paragraph (l).

(g) Deregistration of a *reallocation request* prevents *reallocation transactions* occurring in respect of all the *trading intervals* that occur after the time of deregistration.

(h) *AEMO* must not deregister a *reallocation request* under paragraph (f) otherwise than in accordance with the *reallocation procedures*.

(i) The *Market Participants* may agree to reverse the effect of a registered *reallocation request* by lodging a new *reallocation request* in accordance with the *reallocation procedures* and the reallocation timetable.

(j) *AEMO* must include details of *reallocation transactions* in the *settlement statements* issued to all parties to those *reallocation transactions*.

(k) Where there is a registration of a *reallocation request* in respect of a *trading interval* and that *trading interval* has occurred, a *reallocation transaction* occurs in accordance with that *reallocation request*.

(l) If a *default event* occurs in relation to a party to a *reallocation request* when one or more of the *trading intervals* specified in the *reallocation request* has not occurred, *AEMO* may deregister the *reallocation request* by notice given at any time whilst the *default event* is subsisting.

(m) The deregistration under paragraph (l) is effective immediately upon *AEMO* notifying both parties to a *reallocation request* of the deregistration and the deregistration:

(1) is effective for all *trading intervals* commencing after the time specified in the notice, and notwithstanding that the *default event* may be subsequently cured; and

(2) prevents the completion of the requested *reallocation transactions* in the *trading intervals* that commence at or after the time specified in the deregistration notice.

(n) In addition to any other right *AEMO* may exercise following a *default event*, upon deregistration of a *reallocation request AEMO* may redetermine the *maximum credit limit* and *trading limit* for either or both of the parties to the *reallocation request,* having regard to the deregistration that has occurred.

3.15.11A Reallocation procedures

(a) *AEMO* must develop and *publish* procedures in accordance with the *Rules consultation procedures*, to enable *Market Participants* to create and record *reallocation requests* and *reallocation transactions* in accordance with clause 3.15.11 in respect of electricity trading transactions other than those conducted

through the *market* and/or establish mutual indemnification arrangements with other operators of markets for electricity-based trading (the "*reallocation procedures*").

(b) *AEMO* may, from time to time and in accordance with the *Rules consultation procedures*, amend or replace the *reallocation procedures*.

(c) Paragraph (b) does not apply to amendments to the *reallocation procedures* that are of a minor or administrative nature and *AEMO* may make such amendments at any time.

(d) *NEMMCO* must develop and *publish* the first *reallocation procedures* by 1 January 2008 and there must be such procedures available at all times after that date.

(e) *AEMO* is not required to meet its obligations under paragraph (a) in any way which increases *AEMO's* risks in the collection of moneys owed to it in accordance with any provisions of the *Rules*.

3.15.12 Settlement amount

(a) Subject to clause 3.15.12(b), for each *billing period AEMO* must calculate a net "*settlement amount*" for each *Market Participant* by aggregating the *trading amounts* resulting for each *Market Participant* from each *transaction* in respect of each *trading interval* occurring in that *billing period* together with *Participant fees* determined in accordance with rule 2.11 and any other amounts payable or receivable by the *Market Participants* in that *billing period* under this Chapter 3. The *settlement amount* will be a positive or negative dollar amount for each *Market Participant*.

(b) *AEMO* may calculate an estimate of the net *settlement amount* for each *Market Participant* (the "*estimated settlement amount"*) if, within the time provided for the giving of *preliminary statements* in accordance with clause 3.15.14, *AEMO* is prevented from calculating the net *settlement amount* in accordance with clause 3.15.12(a) by factors which are beyond the control of *AEMO* and which deprive *AEMO* of the relevant data required to calculate the net *settlement amount* (the "*relevant data"),* including:

(1) a failure of:

(i) metering data processing;

(ii) communications; or

(iii) the settlements processing system; and

(2) any other events or circumstances which prevent the calculation of the actual net *settlement amount* by *AEMO*.

(c) *AEMO* must develop the principles and the process to be applied in calculating the *estimated settlement amount*, and make any necessary modifications to those principles and that process, in accordance with the *Rules consultation process*.

3.15.13 Payment of settlement amount

Where the *settlement amount* for a *Market Participant* is negative the absolute value of the *settlement amount* is an amount payable by the *Market Participant* to *AEMO* pursuant to clause 3.15.15. Where the *settlement amount* for a *Market Participant* is positive the *settlement amount* is an amount receivable by the *Market Participant* from *AEMO* pursuant to clause 3.15.15, subject to the provisions of clause 3.15.22.

3.15.14 Preliminary statements

(a) Subject to clause 3.15.14(b), within 5 *business days* after the end of each *billing period*, *AEMO* must give each *Market Participant* a draft of the statement to be given to the *Market Participant* under clause 3.15.15 together with supporting data relating to the *transactions* in that *billing period* and the prices at which electricity was bought and sold by the *Market Participant*.

(b) If *AEMO* calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), *AEMO* must:

(1) when giving a *preliminary statement* in accordance with this clause 3.15.14, provide a detailed report to affected *Market Participants* setting out the basis and calculations used for its estimation; and

(2) if requested to do so by affected *Market Participants*, consult with those *Market Participants* to ascertain whether or not any adjustments are required to the *estimated settlement amount* prior to the giving of a *final statement*.

3.15.15 Final statements

(a) No later than 18 *business days* after the end of each *billing period*, *AEMO* must give to each *Market Participant* a *final statement* stating the amounts payable by the *Market Participant* to *AEMO* or receivable by the *Market Participant* from *AEMO* (subject to clause 3.15.22) in respect of the relevant *billing period*.

(b) Unless *AEMO* has used an *estimated settlement amount* in accordance with clause 3.15.12, the statements issued under this clause 3.15.15 must include supporting data for all amounts payable or receivable.

3.15.15A Use of estimated settlement amounts by AEMO

(a) Subject to clause 3.15.15A(b), if *AEMO* calculates an *estimated settlement amount* in accordance with clause 3.15.12(b), then clauses 3.15.13, 3.15.14 and 3.15.15 will have effect mutatis mutandis by applying the *estimated settlement amount* in place of a *settlement amount* for a *Market Participant* for the purposes of those clauses.

(b) If *AEMO* receives *relevant data*:

(1) after it has given the *preliminary statement* in accordance with clause 3.15.14 but before giving a *final statement,* then it must adjust the *estimated settlement amount* accordingly for the purposes of preparing the *final statement*; or

(2) within 60 days after it has given a *final statement* to which the *relevant data* relates, then *AEMO* must adjust the relevant *estimated settlement amount* accordingly and issue a *revised statement* in accordance with clause 3.15.19(a).

3.15.16 Payment by market participants

On the 20th *business day* after the end of a *billing period*, or 2 *business days* after receiving a statement under clause 3.15.15, whichever is the later, and in accordance with the *timetable* each *Market Participant* must pay to *AEMO* in cleared funds the net amount stated to be payable by that *Market Participant* in that statement whether or not the *Market Participant* continues to dispute the net amount payable.

3.15.17 Payment to market participants

Subject to clause 3.15.22 on the *day* on which *AEMO* is to be paid under clause 3.15.16, *AEMO* must pay to each *Market Participant* in cleared funds the net amount stated to be payable to that *Market Participant* in the relevant statement given to it under clause 3.15.15.

3.15.18 Disputes

(a) In the event of a dispute between a *Market Participant* and *AEMO* concerning either the net amount (including any *estimated settlement amount*) stated in a *preliminary statement* provided under clause 3.15.14 to be payable by or to it or the supporting data, they must each use reasonable endeavours to resolve the dispute within 15 *business days* of the end of the relevant *billing period.*

(b) Disputes in respect of *final statements* or the supporting data provided with them in accordance with clause 3.15.15 must be raised within 6 months of the relevant *billing period*.

(c) Disputes raised under this clause 3.15.18:

(1) can only be raised by a *Market Participant* or *AEMO* issuing a written notice of dispute in the form prescribed by *AEMO*'s *DMS* and otherwise in accordance with rule 8.2;

(2) must be resolved by agreement or pursuant to rule 8.2; and

(3) are, for the purpose of this clause, deemed to have been raised on the day *AEMO* receives the written notice of dispute.

(d) A *Market Participant* that may be materially affected by the outcome of a dispute under clause 3.15.18 may be joined to that dispute by the *Adviser* on request by that *Market Participant* or by *AEMO*.

3.15.19 Revised Statements and Adjustments

(a) Where a dispute about a *final statement* has been either resolved by agreement between *AEMO* and the relevant *Market Participant* ("the Disputant") or determined under rule 8.2 and an adjustment to the *settlement amount* stated in

the disputed *final statement* is required, or an adjustment is required under clause 3.15.10A, *AEMO* must:

(1) recalculate the *settlement amount* for that *Market Participant* and each other *Market Participant* who received a *final statement* for the relevant *billing period*:

(i) in accordance with the applicable procedures set out in the *Rules* and,

(ii) taking into account the adjustment;

(2) if the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is between 95% and 105% of the relevant *settlement amount*:

(i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*; and

(ii) for each *Market Participant* include that amount in the next *routine revised statement* given to those *Market Participants* for the relevant *billing period* practicable and if there is no *routine revised statement*, in accordance with clauses 3.15.19(a)(3)(ii) and (iii).

(3) if the adjustment is required under clause 3.15.10A, or the adjustment is required as a result of a dispute and the recalculated *settlement amount* for the Disputant is less than 95% or more than 105% of the relevant *settlement amount*:

(i) calculate for each *Market Participant* the amount by which the relevant *settlement amount* must be adjusted to be equal to the recalculated *settlement amount* after taking into account any *routine* or *special revised statement*;

(ii) give each *Market Participant* a *special revised statement* for the relevant *billing period* in addition to any *routine revised statement* given under clause 3.15.19(b); and

(iii) give each *Market Participant* a notice advising of the reason why a *settlement statement* was given by *AEMO* under clause 3.15.19(a)(3).

(b) For each *billing period AEMO* must give each *Market Participant* a *routine revised statement* approximately 20 weeks after the relevant *billing period* and approximately 30 weeks after the relevant *billing period*. Each *routine revised statement* must recalculate the *Market Participant's settlement amount* for that *billing period*:

(1) taking into account all amended *metering data*, amended *trading amounts*, amended *Participant fees* and any other amounts payable or receivable by *Market Participants* under this Chapter 3; and

(2) using the most recent version of *AEMO's* settlement calculation software applicable to that *billing period*.

(c) Each *special* and *routine revised statement* issued under this clause must:

(1) state the revised *settlement amount* for the relevant *billing period*;

(2) be issued in accordance with the revised statement policy;

(3) be issued with revised supporting data for the *transactions* for the relevant *billing period* (except in the case of a *special revised statement* dealing with an adjustment required under clause 3.15.10A) and must include supporting data for all amounts payable or receivable.

(d) If *AEMO* has issued a *routine revised statement* or *special revised statement* (the "revised statement") to a *Market Participant* in respect of a *billing period* (the "original *billing period*"), *AEMO* must include in the next *final statement* to the *Market Participant* issued not less than 8 *business days* after the *revised statement* (the "next statement"):

(1) the amount necessary to put the *Market Participant* in the position it would have been in at the time payment was made under clause 3.15.16 or 3.15.17 (as applicable) in respect of the *final statement* for the original *billing period,* if the original *revised statement* had been given as the *final statement* for the *billing period,* but taking into account any adjustments previously made under this clause 3.15.19 as a result of any other *routine revised statement* or *special revised statement* in relation to the original *billing period*; and

(2) interest on the amount referred to in clause 3.15.19(d)(1) computed at the average *bank bill rate* for the period from the date on which payment was required to be made under clauses 3.15.16 and 3.15.17 in respect of the *final statement* for the original *billing period* to the date on which payment is required to be made under those clauses in respect of the next statement.

(e) *AEMO* must develop and publish a policy for *routine* and *special revised statements*. *AEMO* may amend the policy at any time. *AEMO* must develop and amend the policy in accordance with the *Rules consultation procedures.* The policy must include:

(1) a calendar setting out when *routine revised statements* will be issued by *AEMO*;

(2) the process by which the calendar can be amended or varied by *AEMO* and the process by which *Market Participants* are notified of any amendment and variation; and

(3) a transitional process by which *AEMO* will issue any outstanding *routine revised statement*.

3.15.20 Payment of adjustments

(a) Adjustments made and interest calculated and included in a *final statement* under clause 3.15.19 must be paid as part of the *settlement amount* shown on that *final statement* in accordance with either clause 3.15.16 or 3.15.17.

(b) Clause 3.15.22 does not apply to a *final statement* to the extent that the *final statement* incorporates an adjustment amount and interest pursuant to clause 3.15.19.

(c) Disputes in respect of adjustment amounts and interest incorporated into a *final statement* pursuant to clause 3.15.19 must be:

(1) raised within 20 *business days* of the date of the *final statement* that they are incorporated into; and

(2) resolved by agreement or pursuant to the dispute resolution procedures set out in rule 8.2.

3.15.21 Default procedure

(a) Each of the following is a *default event* in relation to a *Market Participant:*

(1) the *Market Participant* does not pay any money due for payment by it under the *Rules* by the appointed time on the due date;

(2) *AEMO* does not receive payment in full of any amount claimed by *AEMO* under any *credit support* in respect of a *Market Participant*, within 90 minutes after the due time for payment of that claim;

(3) the *Market Participant* fails to provide *credit support* required to be supplied under the *Rules* by the appointed time on the due date;

(4) it is unlawful for the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to *AEMO* or it is claimed to be so by the *Market Participant*;

(5) it is unlawful for any *credit support provider* in relation to the *Market Participant* to comply with any of its obligations under the *Rules* or any other obligation owed to *AEMO* or it is claimed to be so by that *credit support provider*;

(6) an authorisation from a government body necessary to enable the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* to carry on their respective principal business or activities ceases to be in full force and effect;

(7) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* ceases or threatens to cease to carry on its business or a substantial part of its business;

(8) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* enters into or takes any action to enter into an arrangement (including a scheme of arrangement),

composition or compromise with, or assignment for the benefit of, all or any class of their respective creditors or members or a moratorium involving any of them;

(9) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* states that it is unable to pay from its own money its debts when they fall due for payment;

(10) a receiver or receiver and manager is appointed in respect of any property of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*;

(11) an administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function under the laws of any relevant jurisdiction is appointed in respect of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*, or any action is taken to appoint any such person;

(12) an application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant*;

(13) A notice under section 601AB(3) of the Corporations Act is given to the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* unless the registration of that *Market Participant* or *credit support provider* is reinstated under section 601AH of the Corporations Act;

(14) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* dies or is dissolved unless such notice of dissolution is discharged;

(15) the *Market Participant* or a *credit support provider* which has provided *credit support* for that *Market Participant* is taken to be insolvent or unable to pay its debts under any applicable legislation.

(b) Where a *default event* has occurred in relation to a *Market Participant*, *AEMO* may:

(1) issue a "*default notice*" specifying the alleged default and requiring the *Market Participant* to remedy the default by 1.00 pm (*Sydney time*) the next day following the date of issue of the *default notice*; and/or

(2) if it has not already done so, make claim upon any *credit support* held in respect of the obligations of the *Market Participant* for such amount as *AEMO* determines represents the amount of any money actually or contingently owing by the *Market Participant* to *AEMO* pursuant to the *Rules*.

(c) If the *default event* is not remedied by 1.00 pm (*Sydney time*) the next *day* following the date of issue of the *default notice* or any later deadline agreed to in writing by *AEMO*, or if *AEMO* receives notice from the *defaulting Market*

Participant that it is not likely to remedy the default, then *AEMO* may issue a "*suspension notice*" under which *AEMO* notifies the *defaulting Market Participant* of the date and time from which it is suspended from trading, and the extent of that suspension.

(d) At the time of issue of a *suspension notice*, or as immediately thereafter as is practicable, *AEMO* must forward a copy of the *suspension notice* to the *AER* and to each *Market Participant* which is *financially responsible* for a *transmission network connection point* to which is allocated a *connection point* for which the defaulting *Market Participant* is *financially responsible*.

(e) *AEMO* must lift a *suspension notice* if the *default event* is remedied and there are no other circumstances in existence which would entitle *AEMO* to issue a *suspension notice*.

(f) *AEMO* must issue a public announcement that the *Market Participant* has been suspended from the *market* including details of the extent of the suspension, simultaneously with, or at any time after, a *suspension notice* is issued. *AEMO* must issue a public notice promptly after a *suspension notice* is lifted.

(g) From the time of suspension that *AEMO* stipulates in a *suspension notice* to a *Market Participant* the *Market Participant* is ineligible to trade or enter into any *transaction* in the *market* to the extent specified in the notice, until such time that *AEMO* notifies the *Market Participant* and all other *Market Participant*s of the date and time that the suspension has been lifted.

(h) The *defaulting Market Participant* must comply with a *suspension notice*.

(i) Following the issue of a *suspension notice*, *AEMO* may do all or any of the following to give effect to the *suspension notice*:

(1) reject any *dispatch bid* or *dispatch offer* submitted by the *defaulting Market Participant*;

(2) withhold the payment of any amounts otherwise due to the *defaulting Market Participant* under the *Rules*; or

(3) deregister or reject any *reallocation request* to which the *defaulting Market Participant* is a party.

The issue of a *suspension notice* which has not been lifted is a "relevant disconnection event" (ie. an event for which a *Registered Participant's market loads* may be *disconnected*) within the meaning of section 63(2) of the *National Electricity Law.*

(j) Unless provided with instructions from the relevant *participating jurisdiction* or *participating jurisdictions* that a nominated third party is to assume financial responsibility for a suspended *Market Participant*'s obligations under the *Rules* and that person does so, then, following the issue of a *suspension notice*, *AEMO* must request the *AER* to seek, and the *AER* must then seek, an order from a court to physically *disconnect market loads* for which the *defaulting Market Participant* is *financially responsible*.

3.15.22 Maximum total payment in respect of a billing period

(a) For the purposes of this clause 3.15.22, the *maximum total payment* in respect of a *billing period* is equal to:

(1) the aggregate of the *energy trading amounts* as determined in accordance with clause 3.15.6 and *reallocation* amounts as determined in accordance with clause 3.15.11 received by *AEMO* from *Market Participants* in accordance with clause 3.15.16 in respect of that *billing period* in accordance with the *timetable* on the latest date for payment by *Market Participants* as described in clause 3.15.16 (called the *payment date*),

plus

(2) if there is one or more *Market Participants* in default, the aggregate amount which *AEMO* is able to obtain from the *credit support* and apply from security deposits provided by the *Market Participants* in default under rule 3.3 on the *payment date* in accordance with the *timetable*,

minus

(3) if there is one or more *Market Participants* in default, the aggregate of amounts payable to *AEMO* by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the *payment date*),

plus

(4) if there is one or more *Market Participants* in default, the aggregate of *energy trading amounts* and *reallocation* amounts payable to *AEMO* under clauses 3.15.6 and 3.15.11 by those *Market Participants* in respect of that *billing period* in accordance with clause 3.15.16 but not received in accordance with the *timetable* on the latest date for payment as described in clause 3.15.16 (called the *payment date*),

minus

(5) *inter-regional* and *intra-regional settlements* surpluses as determined or allocated by *AEMO* in accordance with the procedure established under clause 3.6.5.

(b) The maximum amount which *AEMO* is required to pay to *Market Participants* in respect of *spot market transactions* or *reallocation transactions* in respect of a *billing period* is equal to the *maximum total payment* in respect of that *billing period*.

(c) If the *maximum total payment* in respect of a *billing period* is not sufficient to meet the aggregate of the net amounts payable by *AEMO* to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of the *billing period* ("the *aggregate payment due*"), then the aggregate amount payable by *AEMO* to

each relevant *Market Participant* for any of these *transactions* in respect of that *billing period* shall be reduced by applying the following formula:

$$AAP = SAP \quad x \quad \frac{A}{B}$$

where:

AAP is the reduced amount actually payable by *AEMO* to the relevant *Market Participant* in respect of the relevant *billing period*;

SAP is the net amount that would have been payable to the relevant *Market Participant* in respect of *spot market transactions* or *reallocation transactions* in respect of the relevant *billing period* but for the application of this clause 3.15.22;

A is the *maximum total payment* in respect of the *billing period*; and

B is the *aggregate payment due* in respect of the *billing period*.

(d) This clause 3.15.22 applies notwithstanding any other provision of this Chapter.

3.15.23 Maximum total payment in respect of a financial year

(a) If in a *financial year* a *Market Participant* suffers a reduction in payment under clause 3.15.22 the provisions of this clause shall apply to adjust the payments made to each *Market Participant* in the *financial year*.

(b) The ratio of the overall shortfall to the sum of the *aggregate payments due* for a financial year shall be determined by the following formula:

$$SS = \frac{A_1 + C}{B_1}$$

where:

SS is the ratio of the overall shortfall to the sum of the *aggregate payments due* for the *financial year*;

A_1 is the aggregate of the As referred to in clause 3.15.22, being the *maximum total payment* in respect of each *billing period* forming the *financial year;*

B_1 is the aggregate of the Bs referred to in clause 3.15.22, being the *aggregate payment due* in respect of each *billing period* forming the *financial year*; and

C is the aggregated late payments and *credit support* receipts in respect of *defaulting Market Participants* in the *financial year* plus interest received on such amounts under clause 3.15.25.

(c) The shortfall for a *financial year* shall be applied pro rata to each *Market Participant* in the *financial year* by applying the following formula:

$SS_1 = (SAP_1 \quad SS) - AAP_1$

where:

SS_1 is the shortfall or surplus payable by or due to the *Market Participant* in respect of the *financial year;*

SAP_1 is the aggregate of the SAPs referred to in clause 3.15.22 being the net amounts due to the *Market Participant* in respect of each *billing period* forming the *financial year;*

SS is determined in accordance with clause 3.15.23(b); and

AAP_1 is the aggregate of the AAPs referred to in clause 3.15.22, being the reduced amounts payable to the *Market Participant* in respect of each *billing period* forming the *financial year.*

(d) *AEMO* must issue a statement stating the SS_1 amount payable to or receivable by the *Market Participant* in respect of this clause 3.15.23. If SS_1 is positive, such that an amount is payable by *AEMO* it will credit the sum to the *Market Participant's* account in the next *billing period*. If SS_1 is negative, such that an amount is payable by a *Market Participant*, *AEMO* will at its discretion either debit the sum to the *Market Participant* in the next *billing period* or issue an invoice for immediate payment of the amount.

3.15.24 Compensation for reductions under clause 3.15.23

(a) If:

(1) a *Market Participant* suffers a reduction in payment under clause 3.15.23; and

(2) an amount is recovered by *AEMO* after the end of a *financial year* from the person whose default gave rise (in whole or in part) to the reduction, in respect of the default,

then, subject to clause 3.15.24(c), the *Market Participant* is entitled to be paid by *AEMO* out of the amount recovered the amount of the reduction suffered and interest for receiving the amount of the reduction later than it would otherwise have done.

(b) The amount of the interest payable under clause 3.15.24(a) is to be determined in each case by *AEMO*.

(c) If the amount recovered from the person whose default gave rise to the reduction is not sufficient to pay all *Market Participant*s the amounts to which they are entitled under clause 3.15.23 then the amount recovered is to be distributed amongst them pro rata according to the reductions suffered. Such distribution to be made at any time following the end of a *financial year*.

3.15.25 Interest on overdue amounts

(a) A *Market Participant* or *AEMO* must pay interest on any unpaid moneys due and payable by it under this Chapter.

(b) The rate of interest payable under this clause 3.15.25 is the *bank bill rate* calculated as simple interest on a daily basis from the date payment was due, up to and including the date of payment, with interest compounding monthly on the last *day* of each month whilst the unpaid moneys remain outstanding.

3.16 Participant compensation fund

3.16.1 Establishment of Participant compensation fund

(a) *AEMO* must continue to maintain, in the books of the corporation, a fund called the *Participant compensation fund* for the purpose of paying compensation to *Scheduled Generators*, *Semi-Scheduled Generators* and *Scheduled Network Service Providers* as determined by the *dispute resolution panel* for *scheduling errors* under this Chapter 3.

(b) *AEMO* must pay to the *Participant compensation fund* that component of *Participant fees* under rule 2.11 attributable to the *Participant compensation fund*.

(c) The funding requirement for the *Participant compensation fund* for each *financial year* is the lesser of:

(1) $1,000,000; and

(2) $5,000,000 minus the amount which *AEMO* reasonably estimates will be the balance of the *Participant compensation fund* at the end of the relevant *financial year*.

(d) The *Participant compensation fund* is to be maintained by *AEMO* and is the property of *AEMO*.

(e) Any interest paid on money held in the *Participant compensation fund* will accrue to and form part of the *Participant compensation fund*.

(f) *AEMO* must pay from the *Participant compensation fund* all income tax on interest earned by the *Participant compensation fund* and must pay from the *Participant compensation fund* all bank account debit tax, financial institutions duty and bank fees in relation to the *Participant compensation fund*.

(g) Upon ceasing to be a *Scheduled Generator* or a *Semi-Scheduled Generator*, the relevant *Generator* is not entitled to a refund of any contributions made to the *Participant compensation fund*.

(h) Upon ceasing to be a *Scheduled Network Service Provider*, a *Scheduled Network Service Provider* is not entitled to a refund of any contributions made to the *Participant compensation fund*.

3.16.2 Dispute resolution panel to determine compensation

(a) Where a *scheduling error* occurs, a *Market Participant* may apply to the *dispute resolution panel* for a determination as to compensation under this clause 3.16.2.

(b) Where a *scheduling error* occurs, the *dispute resolution panel* may determine that compensation is payable to *Market Participants* and the amount of any such compensation payable from the *Participant compensation fund*.

(c) A determination by the *dispute resolution panel* as to compensation must be consistent with this clause 3.16.2.

(d) A *Scheduled Generator* or *Semi-Scheduled Generator* who receives an instruction in respect of a *scheduled generating unit* or *semi-scheduled generating unit* (as the case may be) to operate at a lower level than the level at which it would have been instructed to operate had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.

(e) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer less *power* on the *scheduled network service* than it would have been instructed to transfer had the *scheduling error* not occurred, will be entitled to receive in compensation an amount determined by the *dispute resolution panel*.

(f) A *Scheduled Generator* or *Semi-Scheduled Generator* who receives a *dispatch instruction* in respect of a *generating unit* to operate at a level consistent with a *dispatch offer price* (with reference to the relevant *regional reference node*) which is higher than the *dispatch price*, due to the operation of clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.

(g) A *Scheduled Network Service Provider* who receives an instruction in respect of its *scheduled network services* to transfer *power* on the *scheduled network service* consistent with a *network dispatch offer price* but receives less net revenue than would be expected under clause 3.8.6A(f) due to adjustment of the *spot price* for a trading interval under clause 3.9.2B, is entitled to receive in compensation an amount determined by the *dispute resolution panel*.

(h) In determining the level of compensation to which *Market Participants* are entitled in relation to a *scheduling error*, the *dispute resolution panel* must:

(1) Where the entitlement to compensation arises under clause 3.16.2(f), determine compensation on the basis of the actual loading level and not the *dispatch instruction* applicable to the relevant *scheduled generating unit* or *semi-scheduled generating unit* for that *dispatch interval*;

(2) Where the entitlement to compensation arises under clause 3.16.2(g), determine compensation on the basis of the actual loading level and not the *dispatch instruction* applicable to the relevant *scheduled network service* for that *dispatch interval*;

(3) Use the *spot price* as determined under rule 3.9, including any *spot prices* that have been adjusted in accordance with clause 3.9.2B;

(4) Take into account the current balance of the *Participant compensation fund* and the potential for further liabilities to arise during the year;

(5) Recognise that the aggregate liability in any year in respect of *scheduling errors* cannot exceed the balance of the *Participant compensation fund* that would have been available at the end of that year if no compensation payments for *scheduling errors* had been made during that year.

(i) The manner and timing of payments from the *Participant compensation fund* are to be determined by the *dispute resolution panel*.

(j) To the maximum extent permitted by law, *AEMO* is not liable in respect of a *scheduling error* except out of the *Participant compensation fund* as contemplated in this clause 3.16.2.

3.17 AEMO Software

3.17.1 Acceptance of software

AEMO must not alter, reconfigure, reprogram or otherwise modify or enhance any computer software required under this Chapter 3 for the operation of the *market* unless such changes have been duly authorised by the *AER.*

3.17.2 [Deleted]

3.18 Settlement Residue Auctions

3.18.1 Settlement residue concepts

(a) An *"auction participation agreement"* is an agreement between *AEMO* and an *eligible person* concerning the participation by the *eligible person* in *auctions*.

(b) A *"settlement residue distribution agreement"* or "*SRD agreement*" is an agreement between *AEMO* and an *eligible person* entered into following an *auction* under which:

(1) *AEMO* agrees to distribute to the *eligible person* a portion of the *settlements residues* allocated to a *directional interconnector* for a period specified in the *SRD agreement;* and

(2) the *eligible person* agrees to pay *AEMO* a certain amount for the right referred to in clause 3.18.1(b)(1).

(c) For the purposes of this rule 3.18:

(1) all the *regulated interconnectors* between any 2 adjacent *regions* are deemed to constitute a single *interconnector*; and

(2) the deemed *interconnector* referred to in clause 3.18.1(c)(1) between any 2 adjacent *regions* consists of 2 *directional interconnectors*, one

involving a transfer from *region* A to *region* B, and one involving a transfer from *region* B to *region* A.

(d) Subject to clause 3.18.4, *AEMO* must use the portion of the *settlements residue* allocated to a *directional interconnector* remaining after applying the relevant *jurisdictional derogations* under Chapter 9 (as determined by applying the principles referred to in clause 3.6.5) to make payments under *SRD agreements* in relation to that *directional interconnector* and to recover the *auction expense fees.*

(e) Where a person registered as a *Trader* is required to appoint an agent for the purposes of rule 2.5A(c)(2), *AEMO* and the *Trader* must ensure that the *auction participation agreement* and the *SRD agreement* entered into by the *Trader* and its agent provides that the *Trader* and the agent are jointly and severally liable in relation to the obligations of the *Trader* under those agreements.

3.18.2 Auctions and eligible persons

(a) *AEMO* may conduct *auctions* to determine which *eligible persons* will enter into *SRD agreements* with *AEMO*.

(b) *AEMO* may only enter into *SRD agreements* with persons (called "*eligible persons*") which satisfy the following criteria:

(1) the person is a *Market Customer*, a *Generator* or a *Trader*, or a person seeking to be eligible for registration as a *Trader* under rule 2.5A; and

(2) the person satisfies any criteria specified in the *auction rules*, which criteria must comply with clause 3.18.2(g).

(c) *Auctions* must be conducted in accordance with the *auction rules*.

(d) *AEMO* may, with the approval of the *settlement residue committee,* suspend, or remove a suspension, on conducting *auctions* for one or more *directional interconnectors* for a specified period if *AEMO* believes it is not practicable to conduct those *auctions* or those *auctions* are unlikely to lead to the entry into of *SRD agreements* in relation to all of the *settlements residues* being auctioned.

(e) *AEMO* may, after complying with the *Rules consultation procedures,* cease conducting *auctions*.

(f) If *AEMO* takes any action under clause 3.18.2(d) or (e), then it must post a notice on its website specifying the action taken as soon as practicable after taking it.

(g) Any criteria specified in the *auction rules* concerning persons with whom *AEMO* may enter into *SRD agreements* must not exclude any persons other than those specified in subparagraphs (1) – (6) below and must exclude the persons specified in subparagraphs (1), (2), (5) and (6) below:

(1) persons who have not entered into an *auction participation agreement*;

(2) *Transmission Network Service Providers*;

(3) **[Deleted]**

(4) persons:

(i) who have defaulted on payment obligations under an *auction participation agreement* or a *SRD agreement;* or

(ii) in relation to whom a *default event* has occurred;

(5) any person who *AEMO* considers is acting on behalf of or in concert with a person described in clauses 3.18.2(g)(1)-(2);

(5a) any person who *AEMO* considers is acting on behalf of or in concert with a person described in clause 3.18.2(g)(4); or

(6) any person who would be a "retail client" as defined in section 761G (7) of the Corporations Act 2001 (Cth), if they entered into an *SRD agreement* with *AEMO*.

(h) **[Deleted]**

3.18.3 Auction rules

(a) *AEMO* must develop rules (called "*auction rules*") which set out:

(1) additional criteria which a person must satisfy to be an *eligible person* (which must include, without limitation, criteria requiring the person to enter into an *auction participation agreement* with *AEMO* in a form satisfactory to *AEMO*);

(2) the procedures for conducting *auctions* and the timing of *auctions*;

(3) the mechanism for calculating the *auction* clearing price in respect of each *directional interconnector* for each *auction*;

(4) the mechanism for calculating *auction expense fees;*

(5) the procedures and timetable for billing and settling *auction amounts*; and

(6) the standard form of any *auction participation agreement* referred to in clause 3.18.3(a)(1).

(b) In developing and amending the *auction rules, AEMO* must give effect to the following principles:

(1) **[Deleted]**

(2) to the extent reasonably practicable, an *auction* must be structured in a way that maximises the value of the relevant *settlements residue;*

(3) the price for each unit of the *settlements residue* in respect of a *directional interconnector* will be the same for all *SRD agreements* resulting from the same *auction* and will be equal to the *auction* clearing price in respect of the *directional interconnector* for the *auction*; and

(4) enhancing competition and efficiency by promoting interstate trade in electricity.

(c) *AEMO* must make the *auction rules* available to *Registered Participants* and to any other person who requests a copy.

(d) *AEMO* may amend the *auction rules* at any time with the approval of the *settlement residue committee*.

(e) Subject to clause 3.18.3(f), in developing and amending the *auction rules*, *AEMO* must comply with the *Rules consultation procedures*.

(f) *AEMO* need not, provided it has consulted to the extent practicable in the circumstances, comply with the *Rules consultation procedures* in relation to a proposed amendment to the *auction rules* if:

(1) the amendment has the support of at least three-quarters of the members of the *settlement residue committee*; and

(2) *AEMO* considers the amendment is urgent.

3.18.4 Proceeds and fees

(a) *AEMO* must distribute:

(1) subject to clause 3.6.5(a)(4A) and (4B), proceeds from each *auction* in respect of a *directional interconnector*; and

(2) subject to clauses 3.18.4(b) and (c), any portion of the *settlements residue* allocated to the *directional interconnector* which is not the subject of a *SRD agreement,*

to the appropriate *Network Service Providers* in accordance with the principles referred to in clause 3.6.5 in relation to the allocation and distribution of *settlements residue* attributable to *regulated interconnectors*.

(b) The costs and expenses incurred by *AEMO* in establishing and administering the arrangements contemplated by this rule 3.18, in conducting *auctions* under this rule 3.18 and in entering into and administering *auction participation agreements* and *SRD agreements* under this rule 3.18 will be recovered from *settlements residue* by way of *auction expense fees*.

(c) The *auction expense fees* are to be developed by *AEMO* in accordance with the *auction rules* and approved by the *settlement residue committee*, and recovered as follows:

(1) to the extent the *settlements residue* is distributed to *eligible persons* under clause 3.18.1(d), in accordance with the *auction rules*; and

(2) to the extent the *settlements residue* is distributed to *Network Service Providers* under clause 3.18.4(a)(2), as if the *settlements residue* was being distributed to *eligible persons* in accordance with the *auction rules*.

(d) The *auction expense fees* for an *auction* are to be *published* before the *auction*.

(e) *Eligible persons* and *AEMO* must pay *auction amounts* in accordance with the *auction rules*, and, for the avoidance of doubt, amounts payable by *eligible persons* to *AEMO* under *SRD agreements* will not be regarded as amounts payable under the *Rules* for the purposes of rule 3.15.

(f) *AEMO* may nominate an electronic funds transfer facility for the purposes of paying *auction amounts* and, if it does so, *eligible persons*, *Network Service Providers* and *AEMO* must use that facility for paying and receiving a*uction amounts*.

3.18.5 Settlement residue committee

(a) *AEMO* must establish a settlement residue committee.

(b) The functions of the *settlement residue committee* are to:

(1) approve any suspension, or removal of a suspension, imposed by *AEMO* on the conducting of *auctions*;

(2) approve proposed amendments to the *auction rules* developed by *AEMO*;

(3) monitor, review and report on the *auctions* conducted by *AEMO* under this rule 3.18; and

(4) approve the costs and expenses incurred by *AEMO* in conducting *auctions* under this rule 3.18 and in entering into and administrating *auction participation agreements* and *SRD agreements* under this rule 3.18.

(c) The *settlement residue committee* is to consist of:

(1) an employee of *AEMO* appointed by *AEMO*, who will act as chairman of the committee;

(2) a person representing *Generators*;

(3) a person representing *Market Customers*;

(4) a person representing *Transmission Network Service Providers*;

(5) a person representing *Traders*;

(6) a person appointed jointly by the relevant *Ministers* of the *participating jurisdictions*; and

(7) a person appointed by the *AEMC* to represent end use customers of electricity.

(d) *AEMO* may remove the person referred to in clause 3.18.5(c)(1) at any time for any reason.

(e) The persons referred to in clauses 3.18.5(c)(2), (3), (4) and (5) must be appointed and removed by *AEMO* after consultation with the class of *Registered Participants* the person is to represent, and *AEMO* must:

(1) appoint a person agreed to by at least one third in number of the relevant class of *Registered Participants*; and

(2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of *Registered participants*, and must remove that person if so agreed by at least one third in number of the relevant class of *Registered Participants*.

(f) The *Ministers* of the *participating jurisdictions* acting jointly may remove the person referred to in clause 3.18.5(c)(6) at any time for any reason.

(g) The *AEMC* may remove the person referred to in clause 3.18.5(c)(7) at any time for any reason.

(h) A person holds office as a member of the *settlement residue committee* until that person:

(1) resigns from office;

(2) if the person is the person referred to in clause 3.18.5(c)(1), is removed from office by *AEMO* in accordance with clause 3.18.5(d);

(3) if the person is a person referred to in clauses 3.18.5(c)(2), (3), (4) or (5), is removed from office by *AEMO* in accordance with clause 3.18.5(e)(2);

(4) if the person is the person referred to in clause 3.18.5(c)(6), is removed from office by the *Ministers* of the *participating jurisdictions* in accordance with clause 3.18.5(f); or

(5) if the person is the person referred to in clause 3.18.5(c)(7), is removed from office by the *AEMC* in accordance with clause 3.18.5(g),

and such a person is eligible for re-appointment.

(i) A person may resign as a member of the *settlement residue committee* by giving notice in writing to that effect to *AEMO*.

3.19 Market Management Systems Access Procedures

(a) *AEMO* may develop and *publish Market Management Systems Access Procedures* in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, which procedures will govern how *Registered Participants* and *Metering Providers* can use the *market management systems*.

(b) *AEMO* may amend the *Market Management Systems Access Procedures* from time to time in consultation with *Registered Participants* in accordance with

the *Rules consultation procedures*, and any such amendments must be *published* by *AEMO*.

(c) *AEMO* and all *Registered Participants* and *Metering Providers* must comply with the *Market Management Systems Access Procedures*.

(d) A *Registered Participant* which complies with the *Market Management Systems Access Procedures* and promptly pays all relevant *Participant fees* as and when they fall due has a right to be connected to the *market management systems*.

(e) If a *Registered Participant* fails to comply with the *Market Management Systems Access Procedures*, *AEMO* must:

(1) notify that *Registered Participant* describing the nature of the breach; and

(2) at a time following notification of the breach by *AEMO* under clause 3.19(e)(1) determined by *AEMO* having regard to a balancing of the need to provide a *Registered Participant* with the opportunity to remedy the breach and the nature of the breach, notify the AER that the *Registered Participant* has breached the *Market Management Systems Access Procedures*.

3.20 Reliability and Emergency Reserve Trader

3.20.1 Expiry of reserve and emergency reliability trader

This rule 3.20 expires on the earlier of:

(a) 30 June 2012; or

(b) a date determined by the *AEMC* on the advice of the *Reliability Panel* in accordance with clause 3.20.9.

3.20.2 Reliability and emergency reserve trader

(a) *AEMO* must take all reasonable actions to ensure reliability of *supply* by negotiating and entering into contracts to secure the availability of *reserves* under *reserve contracts* ('reliability and emergency reserve trader' or 'RERT') in accordance with:

(1) this rule 3.20;

(2) where relevant:

(i) clauses 1.11, 3.8.1, 3.8.14, 3.9.3, 3.12, 3.12A.5, 3.15.6, 3.15.9, 4.8.5A and 4.8.5B; and

(ii) any other provision of the *Rules* necessary to exercise the *RERT*;

(3) the *RERT principles*; and

(4) the *RERT guidelines*.

(b) *AEMO* must have regard to the following principles ('RERT principles') in exercising the RERT under paragraph (a):

(1) actions taken should be those which *AEMO* reasonably expects, acting reasonably, to have the least distortionary effect on the operation of the *market*; and

(2) actions taken should aim to maximise the effectiveness of *reserve contracts* at the least cost to end use consumers of electricity.

(c) In having regard to the *RERT principles*, *AEMO* must have regard where relevant to the *RERT guidelines*.

3.20.3 Reserve contracts

(a) *AEMO* may enter into one or more contracts with any person in relation to the capacity of:

(1) *scheduled generating units*, *scheduled network services* or *scheduled loads* (being *scheduled reserve contracts*); and

(2) *unscheduled reserves* (being *unscheduled reserve contracts*).

(b) *AEMO* may determine to enter into *reserve contracts* to ensure that the reliability of *supply* in a *region* or *regions* meets the relevant *power system security and reliability standards* established by the *Reliability Panel* for the *region*.

(c) *AEMO* must consult with persons nominated by the relevant *participating jurisdictions* in relation to any determination to enter into contracts under paragraph (b).

(d) *AEMO* must not enter into, or renegotiate, a *reserve contract* more than nine months prior to the date that *AEMO* reasonably expects that the *reserve* under that contract may be required to ensure reliability of *supply*.

(e) Subject to paragraph (d), *AEMO* may :

(1) enter into *reserve contracts*; or

(2) renegotiate existing *reserve contracts*,

in addition to the contracts already entered into by *AEMO* under this rule 3.20.

(f) In entering into *reserve contracts* under paragraph (b) *AEMO* must agree with the relevant nominated persons referred to in paragraph (c) cost-sharing arrangements between the *regions* for the purpose of clause 3.15.9.

(g) If, at any time *AEMO* determines that it is necessary to commence contract negotiations for the provision of additional *reserves*, *AEMO* must *publish* a notice of its intention to do so.

(h) When contracting for the provision of *scheduled reserves* under *scheduled reserve contracts*, *AEMO* must not enter contracts in relation to capacity of *generating units*, *scheduled network services* or *scheduled loads* for which *dispatch offers* or *dispatch bids* have been submitted or are considered by *AEMO* to be likely to be submitted or be otherwise available for *dispatch* in the *trading intervals* to which the contract relates.

Terms and conditions of a contract

(i) If *AEMO* seeks to enter into a *reserve contract* with a *Registered Participant* then the *Registered Participant* must *negotiate* with *AEMO* in good faith as to the terms and conditions of the contract.

(j) *AEMO* may only enter into a *reserve contract* if the contract contains a provision that the other party to the contract has not and will not otherwise offer the *reserve* the subject of the contract in the *market* for the *trading intervals* to which the contract with *AEMO* relates except in accordance with the contract.

3.20.4 Dispatch pricing methodology for unscheduled reserve contracts

(a) Subject to paragraph (c), *AEMO* must develop in accordance with the *Rules consultation procedures* and *publish* details of the methodology it will use to request that *generating units* or *loads* under *unscheduled reserve contracts* be *activated*.

(b) *AEMO* may develop and *publish* the methodology developed in accordance with this clause 3.20.4 as part of the methodology *AEMO* is required to develop under clause 3.9.3(e).

(c) *AEMO* may make minor and administrative amendments to the methodology developed in accordance with this clause 3.20.4 without complying with the *Rules consultation procedures*.

3.20.5 AEMO's risk management and accounts relating to the reliability safety net

(a) *AEMO* may enter into insurance arrangements with an insurance provider with a view to minimising potential financial losses in respect of *AEMO's RERT* activities described in this rule 3.20.

(b) *AEMO* must ensure that it maintains in its books separate accounts relating to the *RERT* functions and powers granted to *AEMO* under this rule 3.20.

3.20.6 Reporting on RERT by AEMO

(a) If a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* with *AEMO* is *dispatched* or *generating units* or *loads* are activated under an *unscheduled reserve contract*, then *AEMO* must, as soon as practicable thereafter, *publish* a report detailing:

(1) the circumstances giving rise to the need for the *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves*;

(2) the basis on which it determined the latest time for that *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves* and on what basis it determined that a market response would not have avoided the need for the *dispatch* of *scheduled reserves* or the *activation* of *unscheduled reserves*;

(3) the changes in *dispatch* outcomes due to the *dispatch* of *scheduled reserves* or *activation* of *unscheduled reserves*; and

(4) the processes implemented by *AEMO* to *dispatch* the *scheduled reserves* or *activate* the *unscheduled reserves*,

and if applicable:

(5) reasons why *AEMO* did not follow any or all of the processes set out in rule 4.8 either in whole or in part prior to the *dispatch* of *scheduled reserves* or the *activation* of *unscheduled reserves*; and

(6) the basis upon which *AEMO* considered it impractical to set *spot prices* and *ancillary service prices* in accordance with clause 3.9.3(b).

(b) As soon as reasonably practicable after *AEMO* has, in accordance with clause 3.15.9, included the amounts arising under a *reserve contract* in a *final statement* provided under clause 3.15.15, *AEMO* must *publish* details of:

(1) the payments under the *reserve contract* for the relevant *billing periods*; and

(2) a breakdown of the recovery of those costs by each category of *Market Customer*, as determined by *AEMO*, in each *region*.

(c) Within 30 *days* of the end of each *financial year* in which *AEMO* has exercised the *RERT*, *AEMO* must *publish* a report detailing:

(1) each occasion during the *financial year* on which it intervened to secure the availability of *reserves*;

(2) each occasion during the *financial year* when a *scheduled generating unit*, *scheduled network service* or *scheduled load* under a *scheduled reserve contract* was *dispatched* or *generating units* or *loads* under an *unscheduled reserve contract* were *activated*; and

(3) its costs and finances in connection with its *RERT* activities during the *financial year* according to appropriate accounting standards including profit and loss, balance sheet, sources and applications of funds.

3.20.7 AEMO's exercise of the RERT

(a) Notwithstanding clauses 4.8.5A and 4.8.5B, if *AEMO* considers the latest time for exercising the *RERT* by:

(1) the *dispatch* of *scheduled reserves* it has available under *scheduled reserve contracts*; or

(2) the *activation* of *unscheduled reserves* it has available under *unscheduled reserve contracts*,

has arrived, *AEMO* may *dispatch* such *scheduled reserves* or *activate* such *unscheduled reserves*.

(b) *AEMO* must follow the relevant procedures in this rule 3.20 prior to *dispatching* a *scheduled generating unit*, *scheduled network service* or *scheduled load* the subject of a *scheduled reserve contract* or *activating generating units* or *loads* the subject of an *unscheduled reserve contract* unless it is not reasonably practicable to do so.

(c) Subject to paragraph (b), *AEMO* must only *dispatch* a *scheduled generating unit*, a *scheduled network service* or a *scheduled load* the subject of a *scheduled reserve contract* or activate *generating units* or *loads* the subject of an *unscheduled reserve contract* in accordance with the procedures developed pursuant to paragraph (e).

(d) In order to effect the *dispatch* of a *scheduled generating unit*, *scheduled network service* or *scheduled load* the subject of a *scheduled reserve contract* or the *activation* of *generating units* or *loads* the subject of an *unscheduled reserve contract AEMO* may:

(1) submit, update or vary *dispatch bids* or *dispatch offers* in relation to all or part of such a *scheduled generating unit*, *scheduled network service* or *scheduled load* which is the subject of a *scheduled reserve contract*; or

(2) change other inputs to the *dispatch process* to give effect to the *dispatch* of *scheduled generating units*, *scheduled network services* or *scheduled loads* the subject of a *scheduled revenue contract* or the *activation* of *generating units* or *loads* the subject of an *unscheduled reserve contract*.

(e) *AEMO* must develop, *publish*, and may amend from time to time, in accordance with the *Rules consultation procedures*, procedures for the exercise of the *RERT* under this rule 3.20 that take into account the *RERT principles* and *RERT guidelines*. These procedures must include measures to be adopted in order to reduce the possibility that *generating units* or *loads* likely to be *activated* under *unscheduled reserve contracts* are otherwise engaged at the time the *unscheduled reserve contracts* are entered into by *AEMO*.

(f) When exercising the *RERT* under this rule 3.20, *AEMO* must take into account the *RERT guidelines*.

(g) *NEMMCO* must *publish* the first procedures referred to in paragraph (e) by 30 June 2009.

3.20.8 RERT Guidelines

(a) For the purposes of this rule 3.20, the *Reliability Panel* must develop and *publish* guidelines (the '*RERT guidelines*') for or with respect to:

(1) what information *AEMO* must take into account when deciding whether to exercise the *RERT*;

(2) the relevance of the *RERT principles* to the exercise of the *RERT*;

(3) the actions that *AEMO* may take to be satisfied that the *reserve* that is to be the subject of a *reserve contract* is not available to the *market* through any other arrangement;

(4) the process *AEMO* should undertake in contracting for *reserves* including the process for tendering for contracts for such *reserves*;

(5) any specific or additional assumptions about key parameters that *AEMO* must take into account in assessing the cost effectiveness of exercising the *RERT*;

(6) matters relevant to *AEMO* managing a portfolio of *reserve contracts*; and

(7) additional forecasts that *AEMO* should take into account prior to exercising the *RERT*.

(b) The *Reliability Panel* must develop, *publish* and amend from time to time, the *RERT guidelines* in accordance with clauses 8.8.3(d) – (l).

(c) The *Reliability Panel* must *publish* the first *RERT guidelines* by 30 November 2008 and there must be such guidelines in place at all times after that date.

3.20.9 Review of reserve and emergency reliability trader

(a) The Reliability Panel must, no later than one year prior to the date the RERT is due to expire under clause 3.20.1, complete a review of the RERT ('RERT review') to determine:

(1) whether the *RERT* should expire on the date specified in clause 3.20.1(a); or

(2) whether the *RERT* should expire prior to the date referred to in subparagraph (1) and, if so, that date;

(b) The *Reliability Panel* must conduct the RERT review in accordance with clauses 8.8.3(d) – (l).

(c) The *Reliability Panel* may conduct the review referred to in paragraph (a) as part of the review conducted by the *Reliability Panel* under clause 8.8.3(b).

(d) On receipt of the written report from the RERT review in accordance with clause 8.8.3(j), the *AEMC* may, taking into account the report, make a determination that the *RERT* is to expire and specify the date of expiry.

(e) The *AEMC* must *publish* the determination referred to in paragraph (d).

Schedule 3.1 - Registered Bid and Offer Data

(a) The *registered bid and offer data* are the standard data requirements for verification and compilation of *dispatch bids* and *dispatch offers* on the *trading day* schedule.

(b) *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* must notify *AEMO* of their *registered bid and offer data* in accordance with this schedule 3.1 in respect of each of their *scheduled loads, semi-scheduled generating units* and *scheduled generating units* at least six weeks prior to commencing participation in the *market*.

(c) *Scheduled Generators, Semi-Scheduled Generators* and *Market Participants* must review their *registered bid and offer data* annually in accordance with the *timetable* advised by *AEMO* and provide details of any *changes* to *AEMO.*

(d) *Registered bid and offer data* may be updated by a *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* at any time but may be subject to audit at *AEMO's* request.

(e) A copy of all *changes* to the data must be returned to each *Scheduled Generator, Semi-Scheduled Generator* and *Market Participant* for verification and resubmission by the *Scheduled Generator*, *Semi-Scheduled Generator* or *Market Participant* as necessary.

(f) *Registered bid and offer data* may include tolerance levels.

Scheduled Generating Unit Data:

Data	Units of Measurement
Power station **information:**	
node number/identifier	
total station registered capacity	MW
total station *sent out generation* at registered capacity	MW
daily *energy constraint,* if applicable	MWh per day
Generating unit **information:**	
full *load*	MW (*generated* and *sent out*)
normal or technical minimum *load*	MW (*generated* and *sent out*)
additional emergency *generation* above registered capacity	MW
maximum ramp rate	MW/minute
response time to full *load* from cold standby	minutes

aggregation data	
capability chart	
notice to *synchronise*	minutes
minimum shutdown time	minutes
maximum shutdowns per day	

Semi-Scheduled Generating Unit Data:

Data	Units of Measurement
Power station **information:**	
node number/identifier	
total registered capacity	MW
Generating unit **information**	
capacity	MW
maximum ramp rate	MW/minute
aggregation data	

Scheduled Load Data:

Data	Units of Measurement
node number/identifier	
normally on or *normally off*	
maximum load	MW
daily *energy constraint*, if applicable	MWh per day
maximum ramp rate	MW/minute
aggregation data	

Scheduled Network Service Data:

Data	Units of Measurement
node number/identifier for *connection points A* and *B*	
registered *power transfer capability* to node 1 (may be seasonal etc)	MW
registered *power transfer capability* to node 2 (may be seasonal etc)	MW
additional transient *power transfer capability* in each direction	MW
maximum ramp rates for transfer (if	MW/minute

applicable)	
loss vs flow as piecewise linear relationships for each direction which, taken together, are convex over the entire range of *power transfer capabilities* in both directions	
aggregation data	

Dispatch Inflexibility Profile:

Data	Units of Measurement
time for response from receipt of *dispatch* instruction from zero *load,* T1 (see clause 3.8.19(e)(1))	minutes
time after T1 required to reach minimum *loading level,* T2 (see clause 3.8.19(e)(2))	minutes
time after T2 for which *plant* must operate at or above the minimum *loading level,* T3 (see clause 3.8.19(e)(3))	minutes
time required by *plant* to reduce from its minimum *loading level* to zero, T4 (see clause 3.8.19(e)(4))	minutes
minimum *loading level* (see clauses 3.8.19(e)(2), (3), (4))	MW

Aggregation Data:

Where *dispatch bids* or *dispatch offers* are submitted for aggregated *generating units*, *market network services* or *loads* then, unless otherwise exempted by *AEMO*, each *Scheduled Generator*, *Semi-Scheduled Generator* and *Market Participant* must provide the information required in accordance with this schedule 3.1 for each *generating unit*, *market network service* or *load* included in those *dispatch bids* or *dispatch offers* both separately and in aggregated form.

Semi-scheduled generating units which together are taken to be one *semi-scheduled generating unit* under clause 2.2.7(k) must provide the information required in accordance with this schedule 3.1 for each *generating unit* both separately and in aggregate.

Schedule 3.2 - [Deleted]

Schedule 3.3 - Principles for Determination of Maximum Credit Limits & Prudential Margins

This schedule sets out the principles to be followed by *AEMO* in determining the *maximum credit limit* and *prudential margin* for a *Market Participant*.

S3.3.1 Principles for determining maximum credit limits

(a) The *maximum credit limit* should be set on the principle of imposing a guarantee of payment being made to *AEMO* to a level of a *reasonable worst case*.

(b) When calculating the *maximum credit limit AEMO* should have regard to:

(1) impartial objectivity rather than subjectivity, though it is recognised that some key parameters will need to be subjectively estimated from a limited amount of data - the estimation should be as impartial as possible;

(2) the average level and volatility of the *regional reference price* for the *region* for which the *maximum credit limit* is being calculated, measured over a period of time comparable to the frequency of breaches of the *maximum credit limit*;

(3) the pattern of the quantity of electricity recorded in the *metering data* for the *Market Participant*;

(4) the quantity and pattern of the *prospective reallocation* in the immediate future;

(5) the correlation between the metered amounts of electricity and the *regional reference price*;

(6) the length of the *credit period*, which is the number of days from the start of a *billing period* to the end of the *reaction period* taking into account:

(i) the length of the *billing period*;

(ii) the typical time from the end of the *billing period* to the day on which *settlement* for that *billing period* is due to be paid (the *payment period*);

(iii) any current written request from the *Market Participant* to *AEMO* for the *maximum credit limit* to be determined on a *payment period* taken, for the purposes of clause 3.3.8 and not otherwise, to be 14 days; and

(iv) the time from a *default event* to the suspension or other removal of the *defaulting Market Participant* from the *market*, being a period of up to 7 days (the *reaction period*);

(7) the statistical distribution of accrued amounts that may be owed to *AEMO*; and

(8) the degree of confidence that the *maximum credit limit* will be large enough to meet large defaults (i.e. the degree of reasonableness in a *reasonable worst case*).

(c) As far as practicable, this schedule 3.3 must be read and construed as taking into account *market ancillary service transactions* for the calculation of the *maximum credit limit* for the relevant *Market Participant*.

S3.3.2 Principles for determining prudential margins

The value of the *prudential margin* for a *Market Participant* is set on the same principles as the *maximum credit limit* except that:

(1) if the aggregate of all *trading amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *trading amounts* are not taken into account when determining the *prudential margin*;

(2) if the aggregate of all *reallocation amounts* for the *Market Participant* is a positive amount the quantity and pattern of those *reallocation amounts* are not taken into account when determining the *prudential margin*; and

(3) the *prudential margin* is calculated in respect of the *reaction period*.

CHAPTER 4

4. Power System Security

4.1 Introduction

4.1.1 Purpose

(a) This Chapter:

(1) provides the framework for achieving and maintaining a secure *power system*;

(2) provides the conditions under which *AEMO* can intervene in the processes of the *spot market* and issue *directions* to *Registered Participants* so as to maintain or re-establish a secure and reliable *power system*;

(3) has the following aims:

(i) to detail the principles and guidelines for achieving and maintaining *power system security*;

(ii) to establish the processes for the assessment of the adequacy of *power system* reserves;

(iii) to establish processes to enable *AEMO* to plan and conduct operations within the *power system* to achieve and maintain *power system security*; and

(iv) to establish processes for the actual *dispatch* of *scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services* and *ancillary services* by *AEMO*.

(b) By virtue of this Chapter and the *National Electricity Law*, *AEMO* has responsibility to maintain and improve *power system security*. This Chapter also requires the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* to advise *AEMO* of the requirements of the *participating jurisdiction* regarding *sensitive loads* and priority of *load shedding* and requires *AEMO* to provide copies of the relevant *load shedding procedures* to the *Jurisdictional System Security Coordinator*.

4.2 Definitions and Principles

This rule sets out certain definitions and concepts that are relevant to this Chapter.

4.2.1 [Deleted]

4.2.2 Satisfactory Operating State

The *power system* is defined as being in a *satisfactory operating state* when:

(a) the *frequency* at all energised *busbars* of the *power system* is within the *normal operating frequency band*, except for brief excursions outside the *normal operating frequency band* but within the *normal operating frequency excursion band*;

(b) the *voltage* magnitudes at all energised *busbars* at any *switchyard* or *substation* of the *power system* are within the relevant limits set by the relevant *Network Service Providers* in accordance with clause S5.1.4 of schedule 5.1;

(c) the current flows on all *transmission lines* of the *power system* are within the ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;

(d) all other *plant* forming part of or impacting on the *power system* is being operated within the relevant operating ratings (accounting for time dependency in the case of emergency ratings) as defined by the relevant *Network Service Providers* in accordance with schedule 5.1;

(e) the configuration of the *power system* is such that the severity of any potential fault is within the capability of circuit breakers to *disconnect* the faulted circuit or equipment; and

(f) the conditions of the *power system* are stable in accordance with requirements designated in or under clause S5.1.8 of schedule 5.1.

4.2.3 Credible and non-credible contingency events

(a) A "*contingency event*" means an event affecting the *power system* which *AEMO* expects would be likely to involve the failure or removal from operational service of one or more *generating units* and/or *transmission elements*.

(b) A "*credible contingency event*" means a *contingency event* the occurrence of which *AEMO* considers to be reasonably possible in the surrounding circumstances including the *technical envelope*. Without limitation, examples of *credible contingency events* are likely to include:

(1) the unexpected automatic or manual *disconnection* of, or the unplanned reduction in capacity of, one operating *generating unit*; or

(2) the unexpected *disconnection* of one major item of *transmission plant* (e.g. *transmission line*, *transformer* or *reactive plant*) other than as a result of a three phase electrical fault anywhere on the *power system*.

(c) **[Deleted]**

(d) **[Deleted]**

(e) A "*non-credible contingency event*" is a *contingency event* other than a *credible contingency event*. Without limitation, examples of *non-credible contingency events* are likely to include:

(1) three phase electrical faults on the *power system*; or

(2) simultaneous disruptive events such as:

(i) multiple *generating unit* failures; or

(ii) double circuit *transmission line* failure (such as may be caused by tower collapse).

(f) **[Deleted]**

4.2.3A Re-classifying contingency events

(a) *Abnormal conditions* are conditions posing added risks to the *power system* including, without limitation, severe weather conditions, lightning, storms and bush fires.

(b) *AEMO* must take all reasonable steps to ensure that it is promptly informed of *abnormal conditions*, and when *abnormal conditions* are known to exist *AEMO* must:

(1) on a regular basis, make reasonable attempts to obtain all information relating to how the *abnormal conditions* may affect a *contingency event*; and

(2) identify any *non-credible contingency event* which is more likely to occur because of the existence of the *abnormal conditions*.

(c) As soon as practicable after *AEMO* identifies a *non-credible contingency event* which is more likely to occur because of the existence of *abnormal conditions*, *AEMO* must provide *Market Participants* with a notification specifying:

(1) the *abnormal conditions*;

(2) the relevant *non-credible contingency event*;

(3) whether *AEMO* has reclassified this *non-credible contingent event* as a *credible contingency event* under clause 4.2.3A(g);

(4) information (other than *confidential information*) in its possession that is relevant to its consideration under clause 4.2.3A(e), the source of that information and the time that information was received or confirmed by *AEMO*;

(5) the time at which the notification has been issued; and

(6) the time at which an updated notification is expected to be issued, where this might be necessary.

(d) *AEMO* must update a notification issued in accordance with clause 4.2.3A(c) as it becomes aware of new information that is material to its consideration under clause 4.2.3A(e), and in any event no later than the time indicated in the

original notification under clause 4.2.3A(c)(6), until such time as it issues a notification specifying that the *abnormal conditions* have ceased to have a material effect on the likely occurrence of the *non-credible contingency event*.

(e) If *AEMO* identifies a *non-credible contingency event* which is more likely to occur because of the existence of *abnormal conditions* it must, on a regular basis, consider whether the occurrence of that *non-credible contingency event* is reasonably possible, having regard to all the facts and circumstances identified in accordance with clause 4.2.3A(b).

(f) In undertaking its consideration in accordance with clause 4.2.3A(e), *AEMO* must have regard to the criteria referred to in clause 4.2.3B.

Note: Clause 4.2.3A(f) will not come into effect until *NEMMCO* has established the criteria referred to in clause 4.2.3B.

(g) If, after undertaking a consideration in accordance with clause 4.2.3A(e), *AEMO* decides that the existence of the *abnormal conditions* make the occurrence of a *non-credible contingency event* reasonably possible, it must reclassify that event to be a *credible contingency event* and must notify *Market Participants* as soon as practicable.

(h) If, after reclassifying a *non-credible contingency event* to be a *credible contingency event* in accordance with clause 4.2.3A(g), *AEMO* considers that the relevant facts and circumstances have changed so that the occurrence of that *credible contingency event* is no longer reasonably possible, *AEMO* may reclassify that *credible contingency event* to be a *non-credible contingency event.* If *AEMO* does so, it must notify *Market Participants* as soon as practicable.

(i) Every six months, *AEMO* must issue a report setting out its reasons for all decisions to re-classify *non-credible contingency events* to be *credible contingency events* under clause 4.2.3A(g) during the relevant period. The report:

(1) must include an explanation of how *AEMO* applied the criteria established in accordance with clause 4.2.3B for each of those decisions; and

(2) may also include *AEMO's* analysis of re-classification trends during the relevant period and its appraisal of the appropriateness and effectiveness of the relevant criteria that were applied in the case of each reclassification decision.

4.2.3B Criteria for re-classifying contingency events

(a) Within six months of the commencement of this clause, *NEMMCO* must establish criteria that it must use when considering whether the existence of *abnormal conditions* make the occurrence of a *non-credible contingency event* reasonably possible under clause 4.2.3A(e).

(b) *AEMO* must review the criteria established under clause 4.2.3B(a) every two years after the date of establishment.

(c) *AEMO* may amend the criteria established under clause 4.2.3B(a).

(d) In establishing, reviewing or amending the criteria under this clause, *AEMO* must:

(1) first consult with relevant stakeholders including *Market Participants, Transmission Network Service Providers, Jurisdictional System Security Coordinators* and relevant emergency services agencies;

(2) ensure that the criteria include a requirement to have regard to the particulars of any risk(s) to the *power system* associated with the various types of *abnormal conditions* that might arise; and

(3) *publish* the criteria on its website as soon as practicable after the criteria have been established or amended.

4.2.4 Secure operating state and power system security

(a) The *power system* is defined to be in a *secure operating state* if, in *AEMO*'s reasonable opinion, taking into consideration the appropriate *power system security* principles described in clause 4.2.6:

(1) the *power system* is in a *satisfactory operating state*; and

(2) the *power system* will return to a *satisfactory operating state* following the occurrence of any *credible contingency event* in accordance with the *power system security and reliability standards*.

(b) Without limitation, in forming the opinions described in clause 4.2.4(a), *AEMO* must:

(1) consider the impact of each of the potentially *constrained interconnectors*; and

(2) use the *technical envelope* as the basis of determining events considered to be *credible contingency events* at that time.

4.2.5 Technical envelope

(a) The *technical envelope* means the technical boundary limits of the *power system* for achieving and maintaining the *secure operating state* of the *power system* for a given demand and *power system* scenario.

(b) *AEMO* must determine and revise the *technical envelope* (as may be necessary from time to time) by taking into account the prevailing *power system* and *plant* conditions as described in clause 4.2.5(c).

(c) In determining and revising the *technical envelope AEMO* must take into account matters such as:

(1) *AEMO's* forecast of total *power system load*;

(2) the provision of the applicable *contingency capacity reserves*;

(3) operation within all *plant* capabilities of *plant* on the *power system*;

(4) *contingency capacity reserves* available to handle any *credible contingency event*;

(5) advised *generation* minimum *load constraints*;

(6) *constraints* on *transmission networks*, including short term limitations;

(7) *ancillary service* requirements;

(8) **[Deleted]**

(9) the existence of proposals for any major equipment or *plant* testing, including the checking of, or possible changes in, *transmission plant* availability; and

(10) applicable *performance standards*.

(d) *AEMO* must, when determining the secure operating limits of the *power system*, assume that the applicable *performance standards* are being met, subject to:

(1) a *Registered Participant* notifying *AEMO*, in accordance with rule 4.15(f), that a *performance standard* is not being met; or

(2) *AEMO* otherwise becoming aware that a *performance standard* is not being met.

4.2.6 General principles for maintaining power system security

The *power system security* principles are as follows:

(a) To the extent practicable, the *power system* should be operated such that it is and will remain in a *secure operating state*.

(b) Following a *contingency event* (whether or not a *credible contingency event*) or a significant change in *power system* conditions, *AEMO* should take all reasonable actions:

(1) to adjust, wherever possible, the operating conditions with a view to returning the *power system* to a *secure operating state* as soon as it is practical to do so, and, in any event, within thirty minutes; or

(2) if any principles and guidelines have been *published* under clause 8.8.1(a)(2a), to adjust, wherever possible, the operating conditions, in accordance with such principles and guidelines, with a view to returning

the *power system* to a *secure operating state* within at most thirty minutes.

(c) Adequate *load shedding* facilities initiated automatically by *frequency* conditions outside the *normal operating frequency excursion band* should be available and in service to restore the *power system* to a *satisfactory operating state* following significant multiple *contingency events*.

(d) **[Deleted]**

(e) Sufficient *system restart ancillary services* should be available in accordance with the *system restart standard* to allow the restoration of *power system security* and any necessary restarting of *generating units* following a *major supply disruption*.

4.2.7 Reliable Operating State

The *power system* is assessed to be in a *reliable operating state* when:

(a) *AEMO* has not *disconnected*, and does not expect to *disconnect*, any points of *load connection* under clause 4.8.9;

(b) no *load shedding* is occurring or expected to occur anywhere on the *power system* under clause 4.8.9; and

(c) in *AEMO's* reasonable opinion the levels of *short term* and *medium term capacity reserves* available to the *power system* are at least equal to the required levels determined in accordance with the *power system security and reliability standards*.

4.2.8 Time for undertaking action

The provisions of clause 1.7.1(l) do not apply to this Chapter and an event which is required under this Chapter to occur on or by a stipulated *day* must occur on or by that *day* whether or not a *business day*.

4.3 Power System Security Responsibilities and Obligations

4.3.1 Responsibility of AEMO for power system security

The *AEMO power system security responsibilities* are:

(a) to maintain *power system security*;

(b) to monitor the operating status of the *power system*;

(c) to co-ordinate the *System Operators* in undertaking certain of its activities and operations and monitoring activities of the *power system*;

(d) to ensure that *high voltage* switching procedures and arrangements are utilised by *Network Service Providers* to provide adequate protection of the *power system*;

(e) to assess potential infringement of the *technical envelope* or *power system operating procedures* which could affect the security of the *power system*;

(f) to ensure that the *power system* is operated within the limits of the *technical envelope*;

(g) to ensure that all *plant* and equipment under its control or co-ordination is operated within the appropriate operational or emergency limits which are advised to *AEMO* by the respective *Network Service Providers* or *Registered Participants*;

(h) to assess the impacts of technical and any operational *plant* on the operation of the *power system*;

(i) to arrange the *dispatch* of *scheduled generating units, semi-scheduled generating units*, *scheduled loads*, *scheduled network services* and *ancillary services* (including *dispatch* by remote control actions or specific directions) in accordance with the *Rules*, allowing for the dynamic nature of the *technical envelope*;

(j) to determine any potential *constraint* on the *dispatch* of *generating units, loads, market network services* and *ancillary services* and to assess the effect of this *constraint* on the maintenance of *power system security*;

(k) to assess the availability and adequacy, including the dynamic response, of *contingency capacity reserves* and *reactive power reserves* in accordance with the *power system security and reliability standards* and to ensure that appropriate levels of *contingency capacity reserves* and *reactive power reserves* are available:

(1) to ensure the *power system* is, and is maintained, in a *satisfactory operating state*; and

(2) to arrest the impacts of a range of significant multiple *contingency events* (affecting up to 60% of the total *power system load*) to allow a prompt restoration or recovery of *power system security*, taking into account under-*frequency* initiated *load shedding* capability provided under *connection agreements* or otherwise;

(l) to determine the required levels of *short term capacity reserves* and *medium term capacity reserves* in accordance with the *power system security and reliability standards*, and to assess the availability of the actual *short term capacity reserve* and actual *medium term capacity reserve* in accordance with the *projected assessment of system adequacy* (PASA), described in Chapter 3, which would be available to supplement utilised *contingency capacity reserves* and, if necessary, initiate action in relation to a *relevant AEMO intervention event*;

(m) to make available to *Registered Participants* as appropriate, information about the potential for, or the occurrence of, a situation which could significantly impact, or is significantly impacting, on *power system security*, and advise of any *low reserve* condition for the relevant periods where the *short term*

capacity reserve and/or *medium term capacity reserve* is assessed as being less than that determined in accordance with the *short term capacity reserve standard* or *medium term capacity reserve standard* respectively;

(n) to refer to *Registered Participants*, as *AEMO* deems appropriate, information of which *AEMO* becomes aware in relation to significant risks to the *power system* where actions to achieve a resolution of those risks are outside the responsibility or control of *AEMO*;

(o) to utilise resources and services provided or procured as *ancillary services* or otherwise to maintain or restore the *satisfactory operating state* of the *power system*;

(p) to procure adequate *system restart ancillary services* in accordance with clause 3.11.4A to enable *AEMO* to co-ordinate a response to a *major supply disruption*;

(q) to interrupt, subject to clause 4.3.2(l), *Registered Participant connections* as necessary during emergency situations to facilitate the re-establishment of the *satisfactory operating state* of the *power system*;

(r) to issue a *direction* or *clause 4.8.9 instruction* (as necessary) to any *Registered Participant*;

(s) to co-ordinate and direct any rotation of widespread interruption of demand in the event of a major *supply* shortfall or disruption;

(t) to liaise with *participating jurisdictions* should there be a need to manage an extensive disruption, including the use of emergency services powers in a *participating jurisdiction*;

(u) to determine the extent to which the levels of *contingency capacity reserves* and *reactive power reserves* are or were appropriate through appropriate testing, auditing and simulation studies;

(v) to investigate and review all major *power system* operational incidents and to initiate action plans to manage any abnormal situations or significant deficiencies which could reasonably threaten *power system security*. Such situations or deficiencies include without limitation:

(1) *power system frequencies* outside those specified in the definition of *satisfactory operating state*;

(2) *power system voltages* outside those specified in the definition of *satisfactory operating state*;

(3) actual or potential *power system* instability; and

(4) unplanned/unexpected operation of major *power system* equipment; and

(w) to ensure that each *System Operator* satisfactorily interacts with *AEMO*, other *System Operators* and *Distribution System Operators* for both *transmission* and

distribution network activities and operations, so that *power system security* is not jeopardised by operations on the *connected transmission networks* and *distribution networks*.

4.3.2 System security

(a) *AEMO* must use its reasonable endeavours, as permitted under the *Rules*, including through the provision of appropriate information to *Registered Participants* to the extent permitted by law and under the *Rules*, to achieve the *AEMO power system security responsibilities* in accordance with the *power system security* principles described in clause 4.2.6.

(b) Where an obligation is imposed on *AEMO* under this Chapter to arrange or control any act, matter or thing or to ensure that any other person undertakes or refrains from any act, that obligation is limited to a requirement for *AEMO* to use reasonable endeavours as permitted under the *Rules*, including to give such directions as are within its powers, to comply with that obligation.

(c) If *AEMO* fails to arrange or control any act, matter or thing or the acts of any other person notwithstanding the use of *AEMO's* reasonable endeavours, *AEMO* will not be taken to have breached such obligation.

(d) *AEMO* must make accessible to *Registered Participants* such information as:

(1) *AEMO* considers appropriate;

(2) *AEMO* is permitted to disclose in order to assist *Registered Participants* to make appropriate *market* decisions; and

(3) *AEMO* is able to disclose to enable *Registered Participants* to consider initiating procedures to manage the potential risk of any necessary action by *AEMO* to restore or maintain *power system security*,

provided that, in doing so, *AEMO* must use reasonable endeavours to ensure that such information is available to those *Registered Participants* who request the information on equivalent bases.

(e) The *Jurisdictional System Security Coordinator* for a *participating jurisdiction* may nominate an individual to be the principal point of contact with *AEMO* for the *Jurisdictional System Security Coordinator*.

(f) The *Jurisdictional System Security Coordinator* for each *participating jurisdiction* must provide *AEMO* with:

(1) a schedule of *sensitive loads* in that jurisdiction, specifying:

(i) the priority, in terms of security of *supply*, that each *load* specified in the schedule has over the other *loads* specified in the schedule; and

(ii) the *loads* (if any) for which the approval of the *Jurisdictional System Security Coordinator* must be obtained by *AEMO* under

clause 4.3.2(l) before *AEMO* can interrupt *supply* to, or prevent reconnection of, that *load*: and

(2) a schedule setting out the order in which *loads* in the *participating jurisdiction*, other than *sensitive loads*, may be shed by *AEMO* for the purposes of undertaking any *load shedding* under rule 4.8.

(g) A *Jurisdictional System Security Coordinator* may from time to time amend the schedules provided to *AEMO* under clause 4.3.2(f) and must provide to *AEMO* a copy of the amended schedules.

(h) *AEMO* must develop, update and maintain a set of procedures for each *participating jurisdiction* under which *loads* will be shed and restored in accordance with the priorities set out in the schedules for that *participating jurisdiction* (which procedures for a *participating jurisdiction* shall be known as the "*load shedding procedures*" for that jurisdiction).

(i) *AEMO* must provide the *Jurisdictional System Security Coordinator* for a *participating jurisdiction* with a copy of the *load shedding procedures* for that *participating jurisdiction*, as amended from time to time.

(j) The *load shedding procedures* for a *participating jurisdiction* must be consistent with the schedules of the *participating jurisdiction* provided under clause 4.3.2(f) and must, without limitation, include a requirement that:

(1) automatic *disconnection* of a *sensitive load* under clause 4.3.5(a) is not to occur until the occurrence of a specified *power system frequency* referred to in the *load shedding procedures*;

(2) any such *sensitive load* (or part thereof) which would otherwise have been part of a block of *interruptible load* in an under-*frequency* band specified in clause 4.3.5(b), must be replaced in that band in relation to the *participating jurisdiction* with an equivalent amount of *interruptible load* nominated by other *Market Customers* in the relevant *participating jurisdiction*;

(3) after *supply* is interrupted to a *load*, *supply* to that *load* must be restored as soon as this can be achieved and in accordance with the schedules of *loads* referred to in clause 4.3.2(f); and

(4) in the event of a major *supply* shortfall, the rotation of any *load shedding* requirements within *regions* (or parts of *regions*) in the *participating jurisdiction* must be in accordance with the *load shedding procedures*.

(k) Notwithstanding any other provision of the *Rules*, *AEMO* must use its reasonable endeavours to ensure that the *power system* is operated in a manner that maintains security of *supply* to any *sensitive loads* prescribed by the *Jurisdictional System Security Coordinator* for each *participating jurisdiction* under clause 4.3.2(f).

(l) (1) Notwithstanding any other provision of the *Rules*, in the event that *AEMO*, in its reasonable opinion for reasons of public safety or for *power*

system security, needs to interrupt *supply* to any *sensitive loads*, *AEMO* may only give a direction requiring that interruption:

(i) in accordance with the *load shedding procedures*; and

(ii) if it is a *sensitive load* of a type described in clause 4.3.2(f)(1)(ii), once the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* has given *AEMO* its approval (which approval must not be unreasonably withheld).

(2) Other than to ensure the maintenance of *power system security* or public safety, after *disconnection*, notwithstanding any other provision of the *Rules, AEMO* must not take any steps to prevent the reconnection of a *sensitive load* of the type described in clause 4.3.2(f)(1)(ii) without the approval of the *Jurisdictional System Security Coordinator* for the relevant *participating jurisdiction* (which approval must not be unreasonably withheld).

4.3.3 The role of System Operators

(a) For the purpose of complying with its obligations under clause 4.3.2, *AEMO* may, from time to time, in addition to any other power or right under the *Rules*:

(1) engage such agents or appoint such delegates as it considers appropriate to carry out on its behalf some or all of its rights, functions and obligations under this Chapter (such persons being known as "*System Operators*" upon registration with *AEMO*); and

(2) organise, enter into and manage any contractual arrangements with appropriately competent service providers.

(b) *AEMO* must make accessible to *Registered Participants* information as to:

(1) the engagement or appointment of any agent, delegate or service provider under clause 4.3.3;

(2) the identity of that agent, delegate or service provider; and

(3) the scope of the engagement or appointment, including without limitation, the activities in relation to which the engagement or appointment applies.

(c) A *Registered Participant* must ensure that, where *AEMO* has engaged or appointed an agent, delegate or service provider under clause 4.3.3 in relation to certain of its rights, functions or obligations, any communications from the *Registered Participant* to *AEMO* under this Chapter concerning the rights, functions or obligations within the scope of the agent's, delegate's or service provider's engagement or appointment are made through that agent, delegate or service provider to the extent notified to the *Registered Participant* by *AEMO*.

(d) A *System Operator* must carry out the rights, functions and obligations in respect of which it has been engaged or appointed by *AEMO* in accordance with the provisions of the *Rules*.

(e) A *System Operator* must, to the extent that the *System Operator* is aware or ought reasonably to have been aware, keep *AEMO* fully and timely informed as to:

(1) the state of the security of the *power system*;

(2) any present or anticipated risks to *power system security*; and

(3) any action contemplated or initiated to address a risk to *power system security* or to restore or maintain the *power system* in a *satisfactory operating state*.

(f) *AEMO* must ensure that any agent engaged, or delegate appointed, under clause 4.3.3(a)(1) is registered by it as a *System Operator*.

(g) Notwithstanding that *AEMO* may have engaged or appointed an agent, delegate or service provider under clause 4.3.3 to carry out a right, function or obligation of *AEMO*, *AEMO* remains liable under the *Rules* for performance of that right, function or obligation.

4.3.4 Network Service Providers

(a) Each *Network Service Provider* must use reasonable endeavours to exercise its rights and obligations in relation to its *networks* so as to co-operate with and assist *AEMO* in the proper discharge of the *AEMO power system security responsibilities*.

(b) Each *Network Service Provider* must use reasonable endeavours to ensure that *interruptible loads* are provided as specified in clause 4.3.5 and clause S5.1.10 of schedule 5.1 (including without limitation, through the inclusion of appropriate provisions in *connection agreements*).

(c) Each *Network Service Provider* must arrange and maintain, in accordance with the standards described in clause 4.3.4(e), controls, monitoring and secure communication systems to facilitate a manually initiated, rotational *load shedding* and restoration process which may be necessary if there is, in *AEMO's* opinion, a prolonged major *supply* shortage or extreme *power system* disruption.

(d) Each *Network Service Provider* must advise *AEMO* of any *ancillary services* or similar services provided under any *connection agreement* to which it is a party.

(e) *AEMO* must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation procedures* which must be met by *Network Service Providers* in arranging and maintaining the controls, monitoring and secure communication systems referred to in clause 4.3.4(c).

(f) Until the standards contemplated by clause 4.3.4(e) are issued by *AEMO*, each *Network Service Provider* must maintain the control, monitoring and secure communication systems referred to in clause 4.3.4(c) that were in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.

(g) Each *Network Service Provider* must plan or operate its *transmission system* or *distribution system* in accordance with the *power system* stability guidelines described in clause 4.3.4(h).

(h) *AEMO* must develop, and may amend, guidelines for *power system* stability but only in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*, and must *publish* the guidelines for *power system* stability.

(i) The *power system* stability guidelines developed in accordance with clause 4.3.4(h) must detail the policies governing *power system* stability so as to facilitate the operation of the *power system* within stable limits.

4.3.5 Market Customer obligations

(a) All *Market Customers* having expected peak demands at *connection points* in excess of 10 MW, must provide automatic *interruptible load* of the type described in clause S5.1.10 of schedule 5.1. The level of this automatic *interruptible load* must be a minimum of 60% of their expected demand, or such other minimum *interruptible load* level as may be periodically determined by the *Reliability Panel*, to be progressively automatically *disconnected* following the occurrence of a *power system* under-*frequency* condition described in the *power system security and reliability standards*.

(b) *Market Customers* must provide their *interruptible load* in manageable blocks spread over a number of steps within under-*frequency* bands from 49.0 Hz down to 47.0 Hz as nominated by *AEMO*.

(c) Any *load shedding* capability the subject of an *ancillary services agreement* or *enabled* as a *market ancillary service* can be counted as automatic *interruptible load* provided for the purposes of clause 4.3.5.

4.4 Power System Frequency Control

4.4.1 Power system frequency control responsibilities

AEMO must use its reasonable endeavours to:

(a) control the *power system frequency*; and

(b) ensure that the *frequency operating standards* set out in the *power system security and reliability standards* are achieved.

4.4.2 Operational frequency control requirements

To assist in the effective control of *power system frequency* by *AEMO* the following provisions apply:

(a) *AEMO* may give *dispatch instructions* in respect of *scheduled generating units, semi-scheduled generating units*, *scheduled loads, scheduled network services* and *market ancillary services* pursuant to rule 4.9;

(b) Each *Generator* must ensure that all of its *generating units* meet the technical requirements for frequency control in clause S5.2.5.11;

(c) *AEMO* must use its reasonable endeavours to arrange to be available and specifically allocated to *regulating duty* such *generating plant* as *AEMO* considers appropriate which can be automatically controlled or directed by *AEMO* to ensure that all normal *load* variations do not result in *frequency* deviations outside the limitations specified in clause 4.2.2(a); and

(d) *AEMO* must use its reasonable endeavours to ensure that adequate *facilities* are available and are under the direction of *AEMO* to allow the managed recovery of the *satisfactory operating state* of the *power system*.

4.4.3 Generator protection requirements

Generators must, in accordance with schedule 5.2 and Chapter 5, provide any necessary automatically initiated protective device or systems to protect their *plant* and associated *facilities* against abnormal *voltage* and extreme *frequency* excursions of the *power system*.

4.5 Control of Power System Voltage

4.5.1 Power system voltage control

(a) *AEMO* must determine the adequacy of the capacity of the *power system* to produce or absorb *reactive power* in the control of the *power system voltages*.

(b) *AEMO*, in consultation with *Network Service Providers*, must assess and determine the limits of the operation of the *power system* associated with the avoidance of *voltage* failure or collapse under any *credible contingency event* scenario.

(c) The limits of operation of the *power system* must be translated by *AEMO*, in consultation with *Network Service Providers*, into key location operational *voltage* settings or limits, *transmission line* capacity limits, *reactive power* production (or absorption) capacity or other appropriate limits to enable their use by *AEMO* in the maintenance of *power system security*.

(d) The determination referred to in clause 4.5.1(b) must include a review of the dynamic stability of the *voltage* of the *power system*.

(e) *AEMO* must use its reasonable endeavours to maintain *voltage* conditions throughout the *power system* so that the *power system* remains in a *satisfactory operating state*.

(f) *AEMO* must use its reasonable endeavours to arrange the provision of *reactive power facilities* and *power system voltage* stabilising *facilities* through:

(1) contractual arrangements for *ancillary services* with appropriate *Registered Participants* in accordance with rule 3.11;

(2) negotiation and agreement with appropriate *Network Service Providers*; or

(3) obligations on the part of *Registered Participants* under their *connection agreements* in accordance with clause 3.11.4(b)(1).

(g) Without limitation, such *reactive power facilities* may include:

(1) *synchronous generator voltage controls* (rotor current adjustment) usually associated with *tap-changing transformers*;

(2) *synchronous condensors* (compensators);

(3) *static VAR compensators* (SVC);

(4) *shunt capacitors*;

(5) *shunt reactors*.

4.5.2 Reactive power reserve requirements

(a) *AEMO* must use its reasonable endeavours to ensure that sufficient *reactive power reserve* is available at all times to maintain or restore the *power system* to a *satisfactory operating state* after the most critical *contingency event* as determined by previous analysis or by periodic contingency analysis by *AEMO*.

(b) If *voltages* are outside acceptable limits, and the means of *voltage* control set out in this rule 4.5 are exhausted, *AEMO* must take all reasonable actions, including to direct changes to demand (through selective *load shedding* from the *power system*), additional *generation* operation or reduction in the *transmission line* flows but only to the extent necessary to restore the *voltages* to within the relevant limits. A *Registered Participant* must comply with any such direction.

4.5.3 Audit and testing

AEMO must arrange, co-ordinate and supervise the conduct of appropriate tests to assess the availability and adequacy of the provision of *reactive power* to control and maintain *power system voltages* under both *satisfactory operating state* and *contingency event* conditions.

4.6 Protection of Power System Equipment

4.6.1 Power system fault levels

(a) *AEMO*, in consultation with *Network Service Providers*, must determine the fault levels at all *busbars* of the *power system* as described in clause 4.6.1(b).

(b) *AEMO* must ensure that there are processes in place, which will allow the determination of fault levels for normal operation of the *power system* and in anticipation of all *credible contingency events* that *AEMO* considers may affect the configuration of the *power system*, so that *AEMO* can identify any *busbar* which could potentially be exposed to a fault level which exceeds the fault *current ratings* of the circuit breakers associated with that *busbar*.

4.6.2 Power system protection co-ordination

AEMO must use its reasonable endeavours to co-ordinate, in consultation with the *Network Service Providers*, the protection of *transmission system plant* and equipment that *AEMO* reasonably considers could affect *power system security*.

4.6.3 Audit and testing

AEMO must use its reasonable endeavours to co-ordinate such inspections and tests as *AEMO* thinks appropriate to ensure that the protection of the *power system* is adequate to protect against damage to *power system plant* and equipment.

4.6.4 Short-term thermal ratings of power system

(a) *AEMO* may act so as to use, or require or recommend actions which use, the full extent of the thermal ratings of *transmission elements* to maintain *power system security*, including the short-term ratings (being time dependent ratings), as defined by the *Network Service Providers* from time to time.

(b) *AEMO* must use its reasonable endeavours not to exceed the ratings defined by the *Network Service Providers* and not to require or recommend action which causes those ratings to be exceeded, to the extent that *AEMO* is or ought reasonably to be aware of such ratings.

4.6.5 Partial outage of power protection systems

(a) Where there is an *outage* of one *protection system* of a *transmission line*, *AEMO* must determine, in consultation with the relevant *Network Service Provider*, the most appropriate action. Depending on the circumstances the determination may be:

(1) to leave the *transmission element* in service for a limited duration;

(2) to take the *transmission element* out of service immediately;

(3) to install a temporary *protection system*;

(4) to accept a degraded performance from the *protection system*, with or without additional operational measures or temporary protection measures to minimise *power system* impact; or

(5) to operate the *transmission element* at a lower capacity.

(b) If there is an *outage* of both *protection systems* on a *transmission line* and *AEMO* determines this to be an unacceptable risk to *power system security*, *AEMO* must take the *transmission element* out of service as soon as possible and advise the appropriate *Network Service Provider* immediately this action is undertaken.

(c) The *Network Service Provider* must comply with a determination made by *AEMO* under this clause 4.6.5 unless, in the reasonable opinion of the *Network Service Provider*, it would threaten the safety of any person or cause material damage.

4.7 Power System Stability Co-ordination

4.7.1 Stability analysis co-ordination

(a) *AEMO* must, in cooperation with the relevant *Network Service Providers*, apply the *power system* stability guidelines described in clause 4.3.4(h) to the conduct of all necessary calculations associated with the stable operation of the *power system* and use its reasonable endeavours to coordinate the determination of the settings of equipment used to maintain *power system* stability. The *Network Service Providers* must submit to *AEMO* for approval the settings of any *transmission* equipment used to maintain the stable operation of the *power system*.

(b) *AEMO* must arrange and endorse the installation of *power system* devices which are approved by *AEMO* to be necessary to assist the stable operation of the *power system*.

4.7.2 Audit and testing

AEMO must arrange, co-ordinate and supervise the conduct of such inspections and tests as it deems appropriate to assess the availability and adequacy of the devices installed to maintain *power system* stability.

4.8 Power System Security Operations

4.8.1 Registered Participants' advice

A *Registered Participant* must promptly advise *AEMO* or a relevant *System Operator* at the time that the *Registered Participant* becomes aware, of any circumstance which could be expected to adversely affect the secure operation of the *power system* or any equipment owned or under the control of the *Registered Participant* or a *Network Service Provider*.

4.8.2 Protection or control system abnormality

(a) If a *Registered Participant* becomes aware that any relevant *protection system* or *control system* is defective or unavailable for service, that *Registered Participant* must advise *AEMO*. If *AEMO* considers it to be a threat to *power system security*, *AEMO* may direct that the equipment protected or operated by the relevant *protection system* or *control system* be taken out of operation or operated as *AEMO* directs.

(b) A *Registered Participant* must comply with a direction given by *AEMO* under clause 4.8.2(a).

4.8.3 AEMO's advice on power system emergency conditions

(a) *AEMO* must *publish* all relevant details promptly after *AEMO* becomes aware of any circumstance with respect to the *power system* which, in the reasonable opinion of *AEMO*, could be expected to materially adversely affect *supply* to or from *Registered Participants*.

(b) Without limitation, such circumstances may include:

(1) electricity *supply* capacity shortfall, being a condition where there are insufficient *generation* or *supply* options available to securely *supply* the total load in a *region*;

(2) unexpected disruption of *power system security*, which may occur when:

(i) an unanticipated major *power system* or *generation plant contingency event* occurs; or

(ii) significant environmental or similar conditions, including weather, storms or fires, are likely to, or are affecting, the *power system*; or

(3) a *major supply disruption*.

4.8.4 Declaration of conditions

AEMO may declare the following conditions in relation to a period of time, either present or future:

(a) *Low reserve* condition - when *AEMO* considers that the *short term capacity reserves* or *medium term capacity reserves* for the period being assessed have fallen below those determined by *AEMO* as being in accordance with the relevant *short term capacity reserve standards* or *medium term capacity reserve standards*;

(b) *Lack of reserve* level 1 (LOR1) – when *AEMO* considers that there is insufficient *short term capacity reserves* available to provide complete replacement of the *contingency capacity reserve* on the occurrence of the *credible contingency event* which has the potential for the most significant impact on the *power system* for the period nominated. This would generally be the instantaneous loss of the largest *generating unit* on the *power system*.

Alternatively, it might be the loss of any *interconnection* under *abnormal conditions*.

(c) *Lack of reserve* level 2 (LOR2) – when *AEMO* considers that the occurrence of the *credible contingency event* which has the potential for the most significant impact on the *power system* is likely to require *involuntary load shedding*. This would generally be the instantaneous loss of the largest *generating unit* on the *power system*. Alternatively, it might be the loss of any *interconnection* under *abnormal conditions*.

(d) *Lack of reserve* level 3 (LOR3) - when *AEMO* considers that *Customer load* (other than *ancillary services* or contracted *interruptible loads*) would be, or is actually being, interrupted automatically or manually in order to maintain or restore the security of the *power system*.

4.8.5 Managing declarations of conditions

(a) *AEMO* must as soon as reasonably practicable *publish* any declaration under clause 4.8.4.

(a1) The *publication* of any such declaration must, to the extent reasonably practicable, include the following:

(1) the nature and extent of the *low reserve* or *lack of reserve* condition; and

(2) the time period over which the *low reserve* or *lack of reserve* condition applies.

(b) If *AEMO* makes a declaration under clause 4.8.4, *AEMO* must use its reasonable endeavours to follow the processes set out in clauses 4.8.5A and 4.8.5B.

(c) Following a declaration under clause 4.8.4, *AEMO* must as soon as reasonably practicable *publish* notice of:

(1) any cancellation of that declaration; or

(2) any significant change in the *low reserve* or *lack of reserve* condition due to changed positions of *Scheduled Network Service Providers*, *Market Customers, Semi-Scheduled Generators* and *Scheduled Generators* or due to other reasons.

4.8.5A Determination of the latest time for AEMO intervention

(a) *AEMO* must immediately *publish* a notice of any foreseeable circumstances that may require *AEMO* to implement a *AEMO intervention event*.

(b) A notice referred to in paragraph (a) must include the forecast circumstances creating the need for the *AEMO intervention event*.

(c) *AEMO* must, as soon as reasonably practicable after the *publication* of a notice in accordance with paragraph (a), estimate and *publish* the latest time at which

it would need to intervene through a *AEMO intervention event* should the response from the *market* not be such as to obviate the need for the *AEMO intervention event*.

(d) In order to estimate the time referred to in paragraph (c), *AEMO* may request information from a *Scheduled Network Service Provider, Scheduled Generator*, *Semi-Scheduled Generator* or *Market Customer* and may specify the time within which that information is to be provided.

(e) The information that *AEMO* may request in accordance with paragraph (d) may include, but is not limited to:

(1) *plant* status;

(2) any expected or planned *plant outages* and the MW capacity affected by the *outage*, proposed start date and time and expected end date and time associated with the *outage* and an indication of the possibility of deferring the *outage*; and

(3) estimates of the relevant costs to be incurred by the *Scheduled Network Service Provider, Scheduled Generator* or *Market Customer* should it be the subject of a *direction*, but only if *AEMO* considers it reasonably likely that such *Scheduled Network Service Provider, Scheduled Generator* or *Market Customer* will be subject to a *direction*.

(f) A *Scheduled Network Service Provider, Scheduled Generator* or *Semi-Scheduled Generator* or *Market Customer* must use reasonable endeavours:

(1) to comply with a request for information under paragraph (d); and

(2) to provide *AEMO* with the information required in the time specified by *AEMO*.

(g) *AEMO* must regularly review its estimate of the latest time at which it would need to intervene through a *AEMO intervention event*, and *publish* any revisions to the estimate.

(h) *AEMO* must treat any information provided in response to a request under paragraph (d) as *confidential information* and use it for the sole purpose of assessing to which *Scheduled Network Service Provider, Market Customer* or *Scheduled Generator* it should issue *directions*.

4.8.5B Notifications of last time of AEMO intervention

If the latest practicable time for a *AEMO intervention event*, as estimated by *AEMO* under clause 4.8.5A, is reached and, taking into account *relevant AEMO intervention events*, the circumstances described under clause 4.8.5A(a) have not been alleviated, *AEMO* must to the extent reasonably practicable immediately:

(1) *publish* a notice that *AEMO*:

(i) considers the time for the negotiation of further *reserve contracts* in accordance with rule 3.20 has elapsed; and

(ii) intends to implement a *AEMO intervention event*; and

(2) amend the *pre-dispatch schedule* to ensure that it is a physically realisable schedule for all periods in which *AEMO* intends to implement a *AEMO intervention event*.

4.8.6 [Deleted]

4.8.7 Managing a power system contingency event

(a) During the period when the *power system* is affected by a *contingency event* *AEMO* must carry out actions, in accordance with the guidelines set out in the *power system security and reliability standards* and its obligations concerning *sensitive loads*, to:

(1) identify the impact of the *contingency event* on *power system security* in terms of the capability of *generating units* or *transmission* or *distribution networks*; and

(2) identify and implement the actions required in each affected *region* to restore the *power system* to its *satisfactory operating state*.

(b) When *contingency events* lead to potential or actual electricity *supply* shortfall events, *AEMO* must follow the procedures outlined in clause 4.8.9.

4.8.8 [Deleted]

4.8.9 Power to issue directions and clause 4.8.9 instructions

(a) Notwithstanding any other provision of rule 4.8:

(1) *AEMO* may require a *Registered Participant* to do any act or thing if *AEMO* is satisfied that it is necessary to do so to maintain or re-establish the *power system* to a *secure operating state,* a *satisfactory operating state,* or a *reliable operating state*; and

(2) *AEMO* may authorise a person to do any of the things contemplated by section 116 of the *National Electricity Law* if *AEMO* is satisfied that it is necessary to do so for reasons of public safety or the security of the electricity system.

(a1) If *AEMO*, or a person authorised by *AEMO*, requires a *Registered Participant* to:

(1) take action as contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law* in relation to *scheduled plant* or a *market generating unit*, *AEMO* is taken to have issued a *direction*; or

(2) take some other action contemplated by clause 4.8.9(a) or section 116 of the *National Electricity Law*, *AEMO* is taken to have issued a *clause 4.8.9 instruction*.

(a2) *AEMO* must use reasonable endeavours to ensure that persons authorised by *AEMO* under clause 4.8.9(a)(2) follow all relevant processes in clause 4.8 prior to issuing a *direction*, unless it is not reasonably practical to do so.

(b) *AEMO* must develop, and may amend from time to time, in accordance with the *Rules consultation procedures*, procedures for the issuance of *directions.* Such procedures must reflect the following principles:

(1) *AEMO* must use its reasonable endeavours to minimise any cost related to *directions* and compensation to *Affected Participants* and *Market Customers* pursuant to clause 3.12.2 and compensation to *Directed Participants* pursuant to clauses 3.15.7 and 3.15.7A;

(2) a *direction* should be revoked as soon as *AEMO* determines that the *direction* is no longer required;

(3) *AEMO* must take into account any applicable guidelines issued by the *Reliability Panel*;

(4) *AEMO* must observe its obligations under clause 4.3.2 concerning *sensitive loads*;

(5) *AEMO* must expressly notify a *Directed Participant* that *AEMO's* requirement or that of another person authorised by *AEMO* pursuant to clause 4.8.9(a) is a *direction*.

(c) A *Registered Participant* must use its reasonable endeavours to comply with a *direction* or *clause 4.8.9 instruction* unless to do so would, in the *Registered Participant's* reasonable opinion, be a hazard to public safety, or materially risk damaging equipment, or contravene any other law.

(c1) Subject to clause 4.8.9(c) a *Registered Participant* must use its best endeavours to comply with a *direction* or *clause 4.8.9 instruction* in accordance with the timeframe specified by *AEMO* in the *direction* or *clause 4.8.9 instruction.*

(c2) A *Market Participant* must not by any act or omission, whether intentionally or recklessly, cause or significantly contribute to the circumstances causing a *direction* to be issued, without reasonable cause.

(d) A *Registered Participant* must immediately notify *AEMO* of its inability to comply or its intention not to comply with a *direction* or *clause 4.8.9 instruction*.

(e) If a *Registered Participant* does not comply with a *direction* or *clause 4.8.9 instruction*, it must within 2 *business days* of the *direction* or *clause 4.8.9 instruction* deliver to *AEMO* and the *AER* a report detailing the reasons for the non compliance together with all relevant facts.

(f) *AEMO* must *publish* a report in accordance with clause 3.13.6A.

(g) Any *Registered Participant* who is aware of a failure to comply with a *direction* or *clause 4.8.9 instruction* or who believes any such failure has taken place must notify *AEMO* and the *AER* in writing and as soon as practicable of that fact.

(h) If *AEMO* issues a *direction* or *clause 4.8.9 instruction*, *AEMO* may, to give effect to the *direction* or *clause 4.8.9 instruction*:

(1) submit, update or vary *dispatch bids*, *dispatch offers* or *rebids* in relation to the *plant* of *Directed Participants* and *Affected Participants*;

(2) change other inputs to the *dispatch process*; or

(3) select a *Market Participant* or *Market Participants* to become *Affected Participants* to implement clause 3.8.1(b)(11).

(i) When issuing *clause 4.8.9 instructions* to implement *load shedding* across *interconnected regions*, *AEMO* must use reasonable endeavours to implement *load shedding* in an equitable manner as specified in the *power system security and reliability standards*, taking into account the *power transfer capability* of the relevant *networks.*

(j) When issuing *clause 4.8.9 instructions* to implement *load shedding*, *AEMO* must comply with its obligations under clauses 4.3.2(e) to (l) and Part 8 of the *National Electricity Law*.

4.8.9A System security directions

(a) Notwithstanding any other provision of the *Rules*, a *Registered Participant* must follow any *direction* issued by or on behalf of *AEMO* and with which that *Registered Participant* is required to comply under Chapter 4 or section 116 of the *National Electricity Law*.

(b) Any event or action required to be performed pursuant to a *direction* issued under Chapter 4 or section 116 of the *National Electricity Law* on or by a stipulated *day* is required by the *Rules* to occur on or by that *day*, whether or not a *business day*.

(c) Any failure to observe such a *direction* will be deemed to be a breach of the *Rules*.

(d) *AEMO* or any *Registered Participant* who is aware of any such failure must notify the *AER* in writing of the failure.

4.8.10 Disconnection of generating units and market network services

(a) Where, under the *Rules*, *AEMO* has the authority or responsibility to *disconnect* a *generating unit* or a *market network service,* then it may do so (either directly or through any agent) as described in rule 5.9.

(b) The relevant *Generator* or *Market Network Service Provider* must provide all reasonable assistance to *AEMO* for the purpose of such *disconnection*.

4.8.11 [Deleted]

4.8.12 System restart plan and local black system procedures

(a) *AEMO* must prepare, and may amend, a *system restart plan* for the purpose of managing and coordinating system restoration activities during any *major supply disruption*.

(b) The *system restart plan* is *confidential information*.

(c) The *system restart plan* must be consistent with the *system restart standard*.

(d) Each *Generator* and *Network Service Provider* must develop *local black system procedures* in accordance with the guidelines referred to in clause 4.8.12(e). A *Generator's* or *Network Service Provider's local black system procedures* must be consistent with any *ancillary services agreement* to provide *system restart ancillary services* to which that *Generator* or *Network Service Provider* is a party. On request from *AEMO*, or as a result of a significant change of circumstances, a *Generator* or *Network Service Provider* must review, and amend if appropriate, its *local black system procedures*.

(e) Subject to clause 4.8.12(f), *AEMO* must develop and *publish*, and may amend, guidelines for the preparation of *local black system procedures* in consultation with *Generators* and *Network Service Providers*.

(f) *Local black system procedures* must:

(1) provide sufficient information to enable *AEMO* to understand the likely condition and capabilities of *plant* following any *major supply disruption* such that *AEMO* is able to effectively co-ordinate the safe implementation of the *system restart plan*; and

(2) appropriately incorporate any relevant *energy support arrangements* to which a *Generator* or *Network Service Provider* may be party.

(g) Each *Generator* and *Network Service Provider* must submit its *local black system procedures*, including any amendments to those procedures, to *AEMO* for approval. In considering whether to grant approval, *AEMO* must take into account the consistency of the *local black system procedures* with:

(1) the guidelines referred to in clause 4.8.12(e); and

(2) relevant components of the *system restart plan*.

(h) *AEMO* may request amendments to *local black system procedures*, including, without limitation, imposing conditions in respect of any *energy support arrangement* as *AEMO* reasonably considers necessary to ensure the integrity of the *system restart plan*. When requesting amendments to the *local black*

system procedures, *AEMO* must provide reasons for those requested amendments.

(i) Requests by *AEMO* for amendments under clause 4.8.12(h) must be by notice in writing to a *Generator* or *Network Service Provider*. Reasonable requests by *AEMO* for amendments under clause 4.8.12(h) must be complied with by a *Generator* or *Network Service Provider*.

(j) *AEMO* and *Network Service Providers* must jointly develop communication protocols to facilitate the exchange of all information relevant to the roles played by *AEMO*, *Network Service Providers*, *Generators* and *Customers* in the implementation of the *system restart plan*.

4.8.13 [Deleted]

4.8.14 Power system restoration

(a) *AEMO* must notify a *Registered Participant* if, in *AEMO's* reasonable opinion, there is a *major supply disruption* which is affecting, or which may affect, that *Registered Participant*.

(b) If *AEMO* advises a *Generator* or *Network Service Provider* of a *major supply disruption*, or if the terms of the relevant *local black system procedures* require the *Generator* or *Network Service Provider* to take action, then the *Generator* or *Network Service Provider* must comply with the requirements of the *local black system procedures* as quickly as is practicable.

(c) Where in *AEMO's* reasonable opinion the *system restart plan* cannot be implemented to effectively ameliorate the actual *power system* conditions created by a *major supply disruption*, *AEMO* may adapt or vary the *system restart plan* as it considers reasonably necessary to suit those actual *power system* conditions.

(d) If there is a *major supply disruption*, a *Generator* or *Network Service Provider* must comply with *AEMO's directions* or *clause 4.8.9 instructions* regarding the restoration of the *power system*.

(e) If there is a *major supply disruption*, a *Market Customer* must comply with *AEMO's directions* with respect to the timing and magnitude of *load* restoration.

4.8.15 Review of operating incidents

(a) For the purposes of this clause 4.8.15:

Reviewable operating incident means:

(1) an incident comprising:

(i) a *non-credible contingency event* or multiple *contingency events* on the *transmission system;* or

(ii) a *black system* condition; or

(iii) an event where the *frequency* of the *power system* is outside limits specified in the *power system security* and *reliability standards*; or

(iv) an event where the *power system* is not in a *secure operating state* for more than 30 minutes; or

(v) an event where *AEMO* issues a *clause 4.8.9 instruction* for *load shedding*,

being an incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions; or

(2) an incident where *AEMO* has been responsible for the *disconnection* of *facilities* of a *Registered Participant* under the circumstances described in clause 5.9.5; or

(3) any other operating incident identified, in accordance with guidelines determined by the *Reliability Panel* under rule 8.8, to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions;

but does not include an incident in respect of which *AEMO* is required to conduct a review under clause 3.14.3(c).

(b) *AEMO* must conduct a review of every reviewable operating incident in order to assess the adequacy of the provision and response of *facilities* or services, and the appropriateness of actions taken to restore or maintain *power system security*.

(c) *AEMO* must prepare a report on the review of a reviewable operating incident, and where that report relates to an incident described in clause 4.8.15(a)(1) or (3), *AEMO* must make the report available to *Registered Participants* and to the public.

(ca) With respect to a report that has been prepared by *AEMO* in accordance with clause 4.8.15(a)(1) or (3) that relates to an operating incident involving a *non-credible contingency event*, the report must include details of how the re-classification criteria published under clause 4.2.3B were assessed and applied in the context of that *non-credible contingency event*.

(d) Where *AEMO* has been responsible for the *disconnection* of *facilities* of a *Registered Participant* under the circumstances described in clause 5.9.5, *AEMO* must provide a report on that review to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring that action.

(e) A *Registered Participant* must co-operate in any review conducted by *AEMO* including making available relevant records and information.

(f) *AEMO* may request a *Registered Participant* to provide such information relating to the performance of equipment of that *Registered Participant* during

and after reviewable operating incidents, as *AEMO* reasonably requires for the purposes of analysing or reporting on the incident.

(g) A *Registered Participant* must provide the information requested by *AEMO* under clause 4.8.15(f) within 20 *business days* unless *AEMO* agrees to a longer period, taking into account:

(1) the particular circumstances of the reviewable operating incident; and

(2) any request made under clause 4.8.15(h).

(h) *AEMO* must as soon as practicable, provide to a *Registered Participant* such information relating to the performance of equipment of the *Registered Participant* during and after a reviewable operating incident as the *Registered Participant* reasonably requests and in relation to which *AEMO* is required to conduct a review under this clause 4.8.15.

(i) At any time when no guidelines are in force under rule 8.8, *AEMO* may conduct a review of any incident referred to in clause 4.8.15(a)(1) that *AEMO* considers to be of significance to the operation of the *power system* or a significant deviation from normal operating conditions, and this clause 4.8.15 applies to and in respect of the review as if the incident were a reviewable operating incident.

4.9 Power System Security Related Market Operations

4.9.1 Load forecasting

(a) *AEMO* must produce (at the intervals indicated and in accordance with the *timetable*) an indicative *load* forecast for each *region* for the periods indicated below:

(1) each *day*, a forecast for the *day* ahead, such forecast divided into half-hourly *load* forecasts for each *trading interval*;

(2) each *day*, a forecast for 2 to 7 *days* (inclusive) ahead, the forecasts for each *day* divided into half-hourly *load* forecasts for each *trading interval*;

(3) every week, a forecast for the 24 *months* ahead of the *day* on which the forecast is produced, with a daily profile based on an estimated weekly peak load condition with allowances for weekends and holidays.

(b) These forecasts must provide an indicative estimate of the total *generation* capacity required to meet the forecast *load* (called "forecast load (as generated)"), and an equivalent estimation of the *supply* required to be delivered to the relevant *transmission network* (called "forecast load (sent out)").

(c) The following factors must be taken into account in the development of the *load* forecasts, to the extent that such are relevant to the particular forecast:

(1) the annual *load* forecasts and *load* profiles collected by the *Network Service Providers* from all *Registered Participants* as required by schedule 5.7, including *load* management expectations and expected *sent out generation* from *embedded generating units*;

(2) historic *load* data, including *transmission* losses and *power station* in-house use of the *generated* output;

(3) weather forecasts and the current and historic weather conditions and pattern;

(4) the incidence of major events or activities which are known to *AEMO*;

(5) anticipated pumped storage *loads*;

(6) official economic activity forecasts from *participating jurisdictions*; and

(7) other information provided by *Registered Participants*.

(d) *AEMO* must develop a methodology to create the indicative *load* forecasts.

(e) A 10% probability of exceedence of *load* forecast must be adopted for the purposes of determination of *short term capacity reserve* and *medium term capacity reserve* requirements under the *power system security and reliability standards*.

(f) *AEMO* must aggregate the regional forecasts to produce a total *interconnected transmission network* indicative *load* schedule for use in *AEMO* processes such as the determination of the required levels of *short term capacity reserves*, *medium term capacity reserves*, the *PASA* assessments and *pre-dispatch schedules*.

(g) The *load* forecasts produced by *AEMO* are indicative only as *AEMO* has no direct influence over *Market Participants* in their decisions about their level of demand and, accordingly, no person may claim any loss or damage from *AEMO* as a result of any difference between *load* forecasts and actual *load*.

4.9.2 Instructions to Scheduled Generators and Semi-Scheduled Generators

(a) To implement *central dispatch* or, where *AEMO* has the power to direct or to instruct a *Scheduled Generator* or *Semi-Scheduled Generator* either under Chapter 3 or this Chapter, then for the purpose of giving effect to that direction or instruction, *AEMO* may at any time give an instruction to the *Generator* in relation to any of its *generating units* (a "*dispatch instruction*"), in accordance with clause 4.9.5(b), nominating:

(1) whether the facilities for *generation* remote control by *AEMO*, if available, must be in service;

(2) in the case of a *scheduled generating unit*, the level or schedule of power to be supplied by the *generating unit* over the specified period; and

(3) in the case of a *semi-scheduled generating unit*, the maximum level of power to be supplied by the *generating unit* over the specified period.

(b) Subject to paragraph (c), *AEMO* may at any time give an instruction to a *Generator* in relation to any of its *generating units* with a *nameplate rating* of 30MW or more, or its *systems* of combined *nameplate rating* of 30 MW or more, nominating that:

(1) the *generating unit* or *generating system* transformer is to be set to a nominated tap position (if it has on-load tap changing capability);

(2) the *generating unit's* or *generating system's voltage control system* set-point is to be set to give a nominated *voltage*; or

(3) the *generating unit* or *generating system* is to be operated to supply or absorb a nominated level of *reactive power* at its *connection point*.

(c) Unless otherwise provided under an *ancillary services agreement* or a *connection agreement, AEMO* must not give an instruction under paragraph (b) that requires a *generating unit* or *generating system* to supply or absorb *reactive power* at a level outside the *plant's* relevant *performance standard*.

(d) A *Scheduled Generator* or *Semi-Scheduled Generator* must, with respect to its *generating units* that have an availability offer of greater than 0 MW (whether *synchronised* or not), ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the relevant *Generator*.

4.9.2A Dispatch Instructions to Scheduled Network Service Providers

(a) Where *AEMO* has the power to direct or to instruct a *Scheduled Network Service Provider* either under Chapter 3 or this Chapter then, for the purpose of giving effect to that direction or instruction, *AEMO* may at any time give an instruction to a *Scheduled Network Service Provider* in relation to any of its *scheduled network services (*a *"dispatch instruction")*, in accordance with clause 4.9.5(b), nominating:

(1) whether the facilities for remote control by *AEMO,* if available, must be in service; and

(2) the level or schedule of power to be transferred by the *scheduled network service* over the specified period.

(b) A *Scheduled Network Service Provider* must, with respect to its *scheduled network services* that have an availability offer of greater than 0 MW, ensure that appropriate personnel are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the *Scheduled Network Service Provider*.

4.9.3 Instructions to Registered Participants

(a) *AEMO* may, at any time, give instructions to *Registered Participants* to reduce their *load* for electricity consistent with *dispatch bids* made in accordance with Chapter 3 ("*dispatch instructions*").

(b) A *Market Customer* must, with respect to *scheduled loads* in relation to which a *dispatch bid* has been submitted for a particular *trading interval*, ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued by *AEMO* to the *Market Customer*.

4.9.3A Ancillary services instructions

(a) *AEMO* may at any time give an instruction (a "*dispatch instruction*") to a *Market Participant* which has classified one or more of its *generating units* or *market loads* as an *ancillary service generating unit* or an *ancillary service load*:

(1) stating that the relevant *generating unit* or *load* has been selected for the provision of a *market ancillary service;*

(2) stating the *market ancillary service* concerned; and

(3) nominating the range to be *enabled*.

(b) *AEMO* may at any time give an instruction (a "*dispatch instruction*") to a *Registered Participant* with which *AEMO* has an *ancillary services agreement* in relation to the provision of *non-market ancillary services* under that *ancillary services agreement* or which *AEMO* is otherwise entitled to give under that *ancillary services agreement*.

(c) A *Market Participant* which has:

(1) classified one or more of its *generating units* or *market loads* as an *ancillary service generating unit* or an *ancillary service load*; and

(2) submitted a *market ancillary service offer* in respect of that *generating unit* or *load*,

must ensure that appropriate personnel or electronic facilities are available at all times to receive and immediately act upon *dispatch instructions* issued to the *Market Participant* by *AEMO*.

(d) A *Registered Participant* with which *AEMO* has an *ancillary services agreement* must ensure that appropriate personnel or electronic facilities are available in accordance with that agreement at all times to receive and immediately act upon *dispatch instructions* issued to the *Registered Participant* by *AEMO*.

4.9.3B Compliance with dispatch instructions

(a) A *dispatch instruction* applies from the time it is given (or any later time specified in the *dispatch instruction*) until the earlier of:

(1) the cessation time specified in the *dispatch instruction* (if any); or

(2) the time when the next *dispatch instruction* applies.

4.9.4 Dispatch related limitations on Scheduled Generators and Semi-Scheduled Generators

A *Scheduled Generator* or *Semi-Scheduled Generator* (as the case may be) must not, unless in the *Generator's* reasonable opinion, public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

(a) send out any *energy* from the *generating unit*, except:

(1) in accordance with a *dispatch instruction*;

(2) in response to remote control signals given by *AEMO* or its agent;

(3) in connection with a test conducted in accordance with the requirements of this Chapter or Chapter 5; or

(4) in the case of a *scheduled generating unit*:

(i) in accordance with the *self-commitment* procedures specified in clause 4.9.6 up to the *self-dispatch level*; or

(ii) as a consequence of operation of the *generating unit's* automatic *frequency response mode* to *power system* conditions;

(b) adjust the *transformer tap position* or *excitation control system voltage* set-point of a *scheduled generating unit* or *semi-scheduled generating unit* except:

(1) in accordance with a *dispatch instruction*;

(2) in response to remote control signals given by *AEMO* or its agent;

(3) if, in the *Generator's* reasonable opinion, the adjustment is urgently required to prevent material damage to the *Generator's plant* or associated equipment, or in the interests of safety; or

(4) in connection with a test conducted in accordance with the requirements of rule 5.7;

(c) *energise* a *connection point* in relation to a *generating unit* without obtaining approval from *AEMO* immediately prior to *energisation*;

(d) *synchronise* or *de-synchronise* a *scheduled generating unit* with a *nameplate rating* of 30MW or more, without prior approval from *AEMO* or other than in response to a *dispatch instruction* except:

(1) *de-synchronisation* as a consequence of the operation of automatic protection equipment; or

(2) where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety;

(e) change the *frequency response mode* of a *scheduled generating unit* without the prior approval of *AEMO*; or

(f) remove from service or interfere with the operation of any *power system* stabilising equipment installed on that *generating unit*.

4.9.4A Dispatch related limitations on Scheduled Network Service Providers

A *Scheduled Network Service Provider* must not, unless in the *Scheduled Network Service Provider's* reasonable opinion public safety would otherwise be threatened or there would be a material risk of damaging equipment or the environment:

(a) *energise* a *connection point* in relation to a *scheduled network service* without prior approval from *AEMO*. This approval must be obtained immediately prior to *energisation;* or

(b) *synchronise* a *scheduled network service* to, or *de-synchronise* a *scheduled network service* from, the *power system* without prior approval from *AEMO* except *de-synchronisation* as a consequence of the operation of automatic protection equipment or where such action is urgently required to prevent material damage to *plant* or equipment or in the interests of safety.

4.9.5 Form of dispatch instructions

(a) A *dispatch instruction* for a *scheduled generating unit*, *semi-scheduled generating unit, scheduled network service* or *scheduled load* must include the following:

(1) specific reference to the *generating unit* (including any aggregated *generating unit*), *scheduled network service* or *scheduled load* or other *facility* to which the *dispatch instruction* applies;

(2) the desired outcome of the *dispatch instruction* (if applicable) such as *active power*, *reactive power*, *transformer* tap or other outcome;

(3) in the case of a *dispatch instruction* under clause 4.9.2, the *ramp rate* (if applicable) which is to be followed by the *generating unit* or a specific target time to reach the outcome specified in the *dispatch instruction*;

(4) the time the *dispatch instruction* is issued;

(5) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time; and

(6) in the case of a *dispatch instruction* for a *semi-scheduled generating unit*:

(i) a notification as to whether the *dispatch interval* to which the *dispatch instruction* relates is a *semi-dispatch interval* or a *non semi-dispatch interval*; and

(ii) the *dispatch level*.

(a1) A *dispatch instruction* for an *ancillary service* must include:

(1) specific reference to the *generating unit* or *load* to which the *dispatch instruction* applies;

(2) the desired outcome of the *dispatch instruction*;

(3) the time the *dispatch instruction* is issued; and

(4) if the time at which the *dispatch instruction* is to take effect is different from the time the *dispatch instruction* is issued, the start time.

(b) The *dispatch instruction* must be provided as provided in clause 3.8.21.

4.9.6 Commitment of scheduled generating units

(a) Self-commitment:

(1) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *AEMO* the expected *synchronising* time at least one hour before the expected actual *synchronising* time, and update this advice 5 minutes before *synchronising* unless otherwise agreed with *AEMO*. *AEMO* may require further notification immediately before *synchronisation*.

(2) The *Scheduled Generator* must advise *AEMO* when a *generating unit* reaches the *self-dispatch level* (being a *self-dispatch level* that is greater than zero MW) and must not increase output above that level unless instructed otherwise by *AEMO* to increase output or unless the increase in output results from the *generating unit* being placed under remote control to be loaded in accordance with Chapter 3.

(b) Instructions by *AEMO* to commit a *generating unit* for service:

(1) A *dispatch instruction* for a *scheduled generating unit* to commit given by *AEMO* in response to a *dispatch offer* must be consistent with the start-up time specified in the latest *dispatch offer* in relation to the *generating unit*.

(2) When *AEMO* issues a *dispatch instruction* to a *generating unit* for *commitment*, *AEMO* must nominate the time at which the *generating unit* is to be *synchronised*.

(3) After a *dispatch instruction* for *commitment* of a *generating unit* has been issued, the relevant *Scheduled Generator* must promptly advise *AEMO* of any inability to meet the nominated time to *synchronise*.

(4) Unless instructed otherwise by *AEMO*, at the time a *dispatch instruction* to *commit* takes effect, the relevant *generating unit* must remain on *self-dispatch level* until *AEMO* issues a further *dispatch instruction*.

4.9.7 De-commitment, or output reduction, by Scheduled Generators

(a) In relation to any *scheduled generating unit*, the *Scheduled Generator* must confirm with *AEMO* the expected *de-synchronising* time at least one hour before the expected actual *de-synchronising* time, and update this advice 5 minutes before *de-synchronising* unless otherwise agreed with *AEMO*. *AEMO* may require further notification immediately before *de-synchronisation*.

(b) The *Scheduled Generator* must not de-commit a *generating unit* unless it has confirmed with *AEMO*:

(1) the time to commence decreasing the output of the *generating unit*;

(2) the *ramp rate* to decrease the output of the *generating unit*;

(3) the time to *de-synchronise* the *generating unit*; and

(4) the output from which the *generating unit* is to be *de-synchronised*.

4.9.8 General responsibilities of Registered Participants

(a) A *Registered Participant* must comply with a *dispatch instruction* given to it by *AEMO* unless to do so would, in the *Registered Participant's* reasonable opinion, be a hazard to public safety or materially risk damaging equipment.

(b) A *Scheduled Generator* must ensure that each of its *scheduled generating units* is at all times able to comply with the latest *generation dispatch offer* under Chapter 3 in respect of that *generating unit*.

(b1) A *Scheduled Network Service Provider* must ensure that each of its *scheduled network services* is at all times able to comply with the latest *network dispatch offer* under Chapter 3 in respect of that *market network service.*

(c) A *Registered Participant* must ensure that each of its *facilities* is at all times able to comply with any relevant *dispatch bid* under Chapter 3 in respect of the *facility* (as adjusted by any subsequent restatement of that bid under Chapter 3).

(d) A *Market Participant* which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load*, as the case may be, must ensure that the *ancillary service generating unit* or *ancillary service load* is at all times able to comply with the latest *market ancillary service offer* for the relevant *trading interval*.

(e) A *Semi-Scheduled Generator* must ensure that each of its *semi-scheduled generating units* is at all times able to comply with its latest *generation dispatch offer*.

4.9.9 Scheduled Generator plant changes

A *Scheduled Generator* must, without delay, notify *AEMO* of any event which has changed or is likely to change the operational availability of any of its *scheduled generating units*, whether the relevant *generating unit* is *synchronised* or not, as soon as the *Scheduled Generator* becomes aware of the event.

4.9.9A Scheduled Network Service Provider plant changes

A Scheduled Network Service Provider must, without delay, notify *AEMO* of any event which has changed or is likely to change the operational availability of any of its *scheduled network services* as soon as the *Scheduled Network Service Provider* becomes aware of the event.

4.9.9B Ancillary service plant changes

A Market Participant which has classified a *generating unit* or *load* as an *ancillary service generating unit* or an *ancillary service load* must, without delay, notify *AEMO* of any event which has changed or is likely to change the availability of a *market ancillary service*, or the capability of the *generating unit* or *load* to respond in the manner contemplated by the *market ancillary service specification*, as soon as the *Market Participant* becomes aware of the event.

4.10 Power System Operating Procedures

4.10.1 Power system operating procedures

(a) The *power system operating procedures* are:

(1) any instructions which may be issued by *AEMO* from time to time covering *market* operations and relating to the operation of the *power system*;

(2) any guidelines issued from time to time by *AEMO* in relation to *power system security*;

(3) regional specific *power system operating procedures* covering the operational activities and associated responsibilities of the relevant *Network Service Provider* and any *Registered Participants* connected to the relevant *transmission network* and operational activities for operational elements of the *transmission network* which interface with *Scheduled Generators* and other *Registered Participants* including, but not limited to, those relating to *sensitive loads*;

(4) the *load shedding procedures*; and

(5) any other procedures, instructions or guidelines which *AEMO* nominates to be and advises to *Registered Participants* as being *power system operating procedures* from time to time.

(b) *AEMO* must compile the *regional specific power system operating procedures* in conjunction with the relevant *Network Service Providers* and the relevant *Jurisdictional System Security Coordinators* to the extent required under clause 4.10.1(a)(3).

(c) *AEMO* must ensure that the various elements of the *power system operating procedures* are consistent with the *load shedding procedures*.

4.10.2 Transmission network operations

(a) *AEMO* must exercise any power granted to it by the *Rules* or the *power system operating procedures* to:

(1) approve the manner in which operations are carried out on a *transmission network* by the relevant *Network Service Provider*; or

(2) instruct the relevant *Network Service Provider* to take any action on the *transmission network*,

in accordance with the appropriate *power system operating procedures*.

(b) A *Registered Participant* must observe the requirements of the relevant *power system operating procedures*.

(c) *Registered Participants* must operate their equipment interfacing with a *transmission network* in accordance with the requirements of Chapter 5, any applicable *connection agreement*, *ancillary services agreement,* and the associated *power system operating procedures*.

(d) *Registered Participants* must ensure that *transmission network* operations performed on their behalf are undertaken by authorised persons advised in writing to *AEMO*.

(e) *AEMO* must ensure the regular review and update of the *regional specific power system operating procedures*.

4.10.3 Operating interaction with distribution networks

(a) *AEMO* and each *Distribution System Operator* must maintain effective communications concerning the conditions of its *distribution network* and the *transmission network* or other *distribution network* to which that *distribution network* is *connected* and to co-ordinate activities where operations are anticipated to affect other *transmission* or *distribution networks*.

(b) *AEMO* must use its reasonable endeavours to give at least 3 *days*' notice to all affected *Distribution System Operators* prior to a *Transmission Network Service Provider* carrying out switching related to a *transmission network* which could reasonably be expected to affect security of *supply* to any *distribution network.*

4.10.4 Switching of a Distributor's high voltage networks

(a) A *Distribution System Operator* must use reasonable endeavours to give *AEMO* at least 3 *days*' prior notice of plans to carry out switching related to the *high voltage* network which could reasonably be expected to materially affect power flows at points of *connection* to a *transmission network*. The *Distribution System Operator* must also notify *AEMO* immediately prior to carrying out any such switching.

(b) A *Distribution System Operator* must provide confirmation to *AEMO* of any such switching immediately after it has occurred.

4.10.5 Switching of reactive power facilities

(a) *AEMO* may instruct a *Distribution System Operator* to place *reactive power facilities* belonging to or controlled by that *Distribution System Operator* into or out of service for the purposes of maintaining *power system security* where prior arrangements concerning these matters have been made between *AEMO* and the *Distribution System Operator*.

(b) Without limitation to its obligations under such prior arrangements, a *Distribution System Operator* must use reasonable endeavours to comply with such an instruction given by *AEMO* or its authorised agent.

4.10.6 Automatic reclose

(a) A *Network Service Provider* or a *Distribution System Operator* may request *AEMO* to disable or enable *automatic reclose equipment* in relation to a particular *transmission* or *distribution network* circuit or a feeder connecting its *distribution network* to a *transmission network* which has *automatic reclose equipment* installed on it.

(b) If a *Distribution System Operator* makes such a request, then *AEMO* must use reasonable endeavours to comply with the request as soon as reasonably practical.

(c) *AEMO* is not responsible for the consequences of automatic reclosure in relation to a circuit or a feeder and the *Distribution System Operator* must indemnify *AEMO* against any loss or damage arising out of *AEMO* complying with such a request unless the loss or damage is due to the failure by *AEMO* to comply with the request within a reasonable period of time.

4.10.7 Inspection of facilities by AEMO

AEMO may inspect a *facility* of a *Registered Participant* as specified in clause 5.7.1.

4.11 Power System Security Support

4.11.1 Remote control and monitoring devices

(a) All remote control, operational *metering* and monitoring devices and local circuits as described in schedules 5.2, 5.3 and 5.3a, must be installed and maintained in accordance with the standards and protocols determined and advised by *AEMO* (for use in the *control centres*) for each:

(1) *scheduled generating unit* and *semi-scheduled generating unit connected* to the *transmission* or *distribution network*; and

(2) *substation* connected to the *network.*

(b) The provider of any *ancillary services* must arrange the installation and maintenance of all *remote control equipment* and *remote monitoring equipment* in accordance with the standards and protocols determined and advised by *AEMO* for use in the relevant *control centre*.

(c) The control and monitoring devices must include provision for indication of *active power* and *reactive power* output, provision for signalling the status and any associated alarm condition relevant to achieving adequate control of the *transmission network*, and provision for indication of *generating plant* active and reactive output.

(d) Where reasonably necessary to allow *AEMO* to discharge its *market* and *power system security* functions *AEMO* may, by notice in writing, require a *Network Service Provider*, a *Generator* or a *Market Network Service Provider* to:

(1) install *remote monitoring equipment* which, in *AEMO's* reasonable opinion, is adequate to enable *AEMO* to remotely monitor the performance of a *transmission system* or *distribution system*, *generating unit* (including its *dynamic performance*) or a *market network service facility* as appropriate; and

(2) upgrade, modify or replace any *remote monitoring equipment* already installed in a *facility* provided that the existing *remote monitoring equipment* is, in the reasonable opinion of *AEMO*, no longer fit for the intended purpose.

(e) A *Network Service Provider*, *Generator* or *Market Network Service Provider* who receives a notice in accordance with clause 4.11.1(d), must comply with the notice within 120 *business days* or such further period that *AEMO* requires.

(f) **[Deleted]**

(g) A *Generator* or *Market Network Service Provider* wishing to receive *dispatch instructions* electronically from *AEMO's automatic generation control system* under clause 3.8.21(d) must comply with *AEMO's* reasonable requirements in respect of how the remote control signals are issued by the *automatic generation control system* and transmitted to the *facility*.

4.11.2 Operational control and indication communication facilities

(a) Each *Network Service Provider* must provide and maintain, in accordance with the standards referred to in clause 4.11.2(c), the necessary primary and, where nominated by *AEMO*, back-up communications facilities for control, operational *metering* and indication from the relevant local sites to the appropriate interfacing termination as nominated by *AEMO*.

(b) *AEMO* must provide and maintain the communication facilities between control centres of each *Transmission Network Service Provider,* on the one hand, and the *AEMO co-ordinating centre,* on the other hand.

(c) *AEMO* must develop, and may amend, standards in consultation with *Network Service Providers* in accordance with the *Rules consultation procedures* which must be met by *Network Service Providers* in providing and maintaining the facilities referred to in clause 4.11.2(a).

(d) Until the standards contemplated by clause 4.11.2(c) are issued by *AEMO*, each *Network Service Provider* must maintain the primary and back-up communications facilities referred to in clause 4.11.2(a) that were in place at 13 December 1998 so as to achieve substantially the same performance and functionality as they did over the 12 months prior to 13 December 1998.

4.11.3 Power system voice/data operational communication facilities

(a) *Network Service Providers*, *System Operators*, *Distribution System Operators*, *Generators* and *Market Participants* must advise *AEMO* of each nominated person for the purposes of giving or receiving *operational communications* in relation to each of its *facilities*. The persons so nominated must be those responsible for undertaking the operation of the relevant equipment of the relevant *Registered Participant*.

(b) Contact personnel details which must be forwarded to *AEMO* include:

(1) title of contact personnel;

(2) the telephone numbers of those personnel;

(3) the telephone numbers of other available communication systems in relation to the relevant *facility*;

(4) a facsimile number for the relevant *facility*; and

(5) an electronic mail address for the relevant *facility*.

(c) Each *Registered Participant* must provide, for each nominated person, two independent telephone communication systems fully compatible with the equipment installed at the appropriate *control centre* nominated by *AEMO*.

(d) Each *Registered Participant* must maintain both telephone communication systems in good repair and must investigate faults within 4 hours, or as

otherwise agreed with *AEMO*, of a fault being identified and must repair or procure the repair of faults promptly.

(e) Each *Registered Participant* must establish and maintain a form of electronic mail facility as approved by *AEMO* for communication purposes (such approval may not be unreasonably withheld).

(f) *AEMO* must advise all *Registered Participants* of nominated persons for the purposes of giving or receiving *operational communications*.

(g) Contact personnel details to be provided by *AEMO* include title, telephone numbers, a facsimile number and an electronic mail address for the contact person.

4.11.4 Records of power system operational communication

(a) *AEMO* and the *System Operators* must record each telephone *operational communication* in the form of log book entries or by another auditable method which provides a permanent record as soon as practicable after making or receiving the *operational communication*.

(b) Records of *operational communications* must include the time and content of each communication and must identify the parties to each communication.

(c) Voice recordings of telephone *operational communications* may be undertaken by *AEMO* and the *System Operators*. *AEMO* and the *System Operators* must ensure that, when a telephone conversation is being recorded under this clause, the persons having the conversation receive an audible indication that the conversation is being recorded. Voice recordings may be used as an alternative to written logs.

(d) *AEMO* and the *System Operators* must retain all *operational communications* records including voice recordings for a minimum of 7 years.

(e) In the event of a dispute involving an *operational communication*, the records of that *operational communication* maintained by, or on behalf of, *AEMO* will constitute prima facie evidence of the contents of the *operational communication*.

(f) Any recordings made in accordance with this clause 4.11.4 must be made in accordance with the provisions of all applicable privacy laws.

4.11.5 Agent communications

(a) A *Registered Participant* may appoint an agent (called a "*Registered Participant Agent*") to co-ordinate operations of one or more of its *facilities* on its behalf, but only with the prior written consent of *AEMO*.

(b) A *Registered Participant* which has appointed a *Registered Participant Agent* may replace that *Registered Participant Agent* but only with the prior written consent of *AEMO*.

(c) *AEMO* may only withhold its consent to the appointment of a *Registered Participant Agent* under clause 4.11.5(a) or (b) if it reasonably believes that the relevant person is not suitably qualified or experienced to operate the relevant *facility*.

(d) For the purposes of the *Rules*, acts or omissions of a *Registered Participant Agent* are deemed to be acts or omissions of the relevant *Registered Participant*.

(e) *AEMO* and its representatives (including authorised agents) may:

(1) rely upon any communications given by a *Registered Participant Agent* as being given by the relevant *Registered Participant*; and

(2) rely upon any communications given to a *Registered Participant Agent* as having been given to the relevant *Registered Participant*.

(f) *AEMO* and the *System Operators* are not required to consider whether any instruction has been given to a *Registered Participant Agent* by the relevant *Registered Participant* or the terms of those instructions.

4.12 Nomenclature Standards

(a) A *Network Service Provider* must use the *nomenclature standards* for *transmission* equipment and apparatus as agreed with *AEMO* or, failing agreement, as determined by *AEMO*.

(b) A *Registered Participant* must use reasonable endeavours to ensure that its *representatives* comply with the *nomenclature standards* in any *operational communications* with *AEMO*.

(c) A *Registered Participant* must ensure that nameplates on its equipment relevant to operations at any point within the *power system* conform to the requirements set out in the *nomenclature standards*.

(d) A *Registered Participant* must use reasonable endeavours to ensure that nameplates on its equipment relevant to operations at any point within the *power system* are maintained to ensure easy and accurate identification of equipment.

(e) A *Registered Participant* must ensure that technical drawings and documentation provided to *AEMO* comply with the *nomenclature standards*.

(f) *AEMO* may, by notice in writing, request a *Registered Participant* to change the existing numbering or nomenclature of *transmission* equipment and apparatus of the *Registered Participant* for purposes of uniformity, and the *Registered Participant* must comply with such a request provided that if the existing numbering or nomenclature conforms with the *nomenclature standards*, *AEMO* must pay all reasonable costs incurred in complying with the request.

4.13 [Deleted]

4.14 Acceptance of Performance Standards

(a) **[Deleted]**

(b) **[Deleted]**

(c) **[Deleted]**

(d) **[Deleted]**

(e) **[Deleted]**

(f) **[Deleted]**

(g) **[Deleted]**

(h) **[Deleted]**

(i) **[Deleted]**

(j) **[Deleted]**

(k) **[Deleted]**

(l) **[Deleted]**

(m) **[Deleted]**

(n) *AEMO* must establish and maintain a register of the *performance standards* applicable to *plant* as advised by *Registered Participants* in accordance with clause 5.3.7(g)(1) or established in accordance with rule 4.14.

(o) *AEMO* or, in respect of a matter concerning the quality of *supply* to *Network Users, AEMO* in consultation with the relevant *Network Service Provider,* must, when determining the applicable *performance standard* for a particular requirement based on any provision of schedules 5.1, 5.2, 5.3 and 5.3a, require a *Registered Participant* to meet or exceed the *minimum access standard* but must not require the *Registered Participant* to exceed the relevant *automatic access standard* for that requirement.

(p) A *performance standard* may be amended at any time by agreement between *AEMO*, the relevant *Registered Participant* and the *Network Service Provider* if:

(1) where the *performance standard* was established under a transitional arrangement in rule 4.16 or 4.17, the amendment is consistent with the actual *plant* capability agreed between *AEMO*, the relevant *Registered Participant* and the *Network Service Provider*, even if it is less than the relevant *minimum access standard* that applied to applications to *connect* at the time of agreement; or

(2) the amendment satisfies all requirements for *negotiated access standards* under clause 5.3.4A(b); or

(3) the amendment satisfies all requirements to be an *automatic access standard*.

(q) *AEMO* must not withhold agreement under rule 4.14(p) on a matter that is not a *AEMO advisory matter* under clause 5.3.4A(a), unless the proposed amendment would adversely affect *power system security*.

(r) The *Network Service Provider* may as a condition of considering an amendment proposed under rule 4.14(p) require payment of a fee to meet the reasonable costs anticipated to be incurred by the *Network Service Provider*, other *Network Service Providers* and *AEMO*, in the assessment of the proposed amendment.

(s) The *Network Service Provider* must require payment of a fee under rule 4.14(r) if so requested by *AEMO*.

(t) On payment of the required fee referred to in rule 4.14(r), the *Network Service Provider* must pay the costs anticipated to be incurred by the other *Network Service Providers* and *AEMO*, as appropriate.

4.15 Compliance with Performance Standards

(a) A *Registered Participant* must:

(1) ensure that its *plant* meets or exceeds the *performance standard* applicable to its *plant*; and

(2) ensure that its *plant* is not likely to cause a material adverse effect on *power system security* through its failure to comply with a *performance standard*; and

(3) immediately ensure that its *plant* ceases to be likely to cause a material adverse effect on *power system security* through its failure to comply with a *performance standard*, if:

(i) the *Registered Participant* reasonably believes that by failing to comply with a *performance standard*, its *plant* is likely to cause a material adverse effect on *power system security*; or

(ii) *AEMO* advises the *Registered Participant* that by failing to comply with a *performance standard*, the *Registered Participant's plant* is likely to cause a material adverse effect on *power system security*.

(b) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating a *plant* to which a *performance standard* applies must institute and maintain a compliance program which complies with rule 4.15(c). The compliance program must be instituted, as soon as reasonably practicable, but no later than:

(1) 6 months after the day that *AEMO* gives notice to the *Registered Participant* of registration of the *performance standard* under rule 4.14(n); or

(2) 6 months after the day on which the *plant* commences operation.

(c) A compliance program instituted and maintained under rule 4.15(b) must:

(1) be consistent with the *template for generator compliance programs*; and

(2) include procedures to monitor the performance of the *plant* in a manner that is consistent with *good electricity industry practice*; and

(3) be modified to be consistent with any amendments made under clause 8.8.3(ba) to the *template for generator compliance programs*, by no later than 6 months after amendments to the *template for generator compliance programs* are *published* or by a date determined by the *Reliability Panel*; and

(4) provide reasonable assurance of ongoing compliance with each applicable *performance standard*.

(ca) The *template for generator compliance programs* must:

(1) cover all *performance standards*; and

(2) define suitable testing and monitoring regimes for each *performance standard* so that a *Registered Participant* can select a regime that complies with the obligations set out in rules 4.15(a), 4.15(b) and 4.15(c) for their particular *plant*.

(d) The *AER* may request that a *Registered Participant*, who is required to institute and maintain a compliance program in accordance with rule 4.15(b) or clause 5.7.4(a1), deliver to the *AER*:

(1) the compliance program records setting out the written results of the performance monitoring conducted in accordance with rule 4.15(f) or clause 5.7.4(a2)(1); and

(2) any other records maintained in accordance with clause 5.7.3 or clause 5.7.4, if applicable.

(e) Each *Registered Participant* must maintain the compliance program records and any other records developed or maintained under clause 5.7.3 or clause 5.7.4 for 7 years and deliver such records to the *AER*, in accordance with rule 4.15(d), within 5 *business days* of the date of the request or such further period as the *AER* requires.

(f) A *Registered Participant* who engages in the activity of planning, owning, controlling or operating a *plant* to which a *performance standard* applies must immediately notify *AEMO* if:

(1) the *Registered Participant* becomes aware that the *plant* is breaching a *performance standard* applicable to the *plant*; or

(2) the *Registered Participant* reasonably believes that the *plant* is likely to breach a *performance standard* applicable to the *plant,*

and *AEMO* must forward a copy of that notice to the *AER* and the relevant *Network Service Provider* no later than 5 *business days* from the day on which *AEMO* received the notice.

(g) A notice in accordance with rule 4.15(f) must detail:

(1) the reason for the actual or likely non-conformance of the *plant* with the *performance standard*;

(2) the actual or likely time of commencement of non-conformance of the *plant* with the *performance standard*;

(3) the expected duration of non-conformance of the *plant* with the *performance standard*; and

(4) the expected performance of the *plant* in comparison with the *performance standard*.

(h) A *Registered Participant* who has notified *AEMO* in accordance with rule 4.15(f), must notify *AEMO* and the relevant *Network Service Provider* that its *plant* has returned to compliance with the *performance standard* immediately following the *Registered Participant* becoming aware of the return of the *plant* to compliance with the *performance standard*.

(i) If:

(1) a *Registered Participant* notifies *AEMO* in accordance with rule 4.15(f); or

(2) *AEMO* otherwise reasonably believes that the *plant* of a *Registered Participant,* in respect of which a *performance standard* applies, is in breach of that *performance standard*,

then:

(3) *AEMO* must, in accordance with rule 4.15(j), notify the *Registered Participant* and the relevant *Network Service Provider* of its determination on the period within which the *Registered Participant* must rectify the breach; and

(4) *AEMO* must notify the *AER* of a breach notified in accordance with rule 4.15(i)(1) or of its reasonable belief of a breach in accordance with rule 4.15(i)(2), as the case may be; and

(5) the *Registered Participant* must rectify the breach within that period, unless the *Registered Participant* seeks a review from the *AER* of the rectification period under rule 4.15(n).

(j) *AEMO* must, when determining the period within which a *Registered Participant* is required to rectify a *performance standard* breach in accordance with rule 4.15(i), take into consideration:

(1) the time that *AEMO*, in its reasonable opinion, considers necessary to provide the *Registered Participant* with the opportunity to remedy the breach; and

(2) the impact on the operation of the *NEM*, including on the *power system* and the *spot market*, resulting from the breach; and

(3) any actions required by *AEMO* in response to the breach.

(k) **[Deleted]**

(l) **[Deleted]**

(m) **[Deleted]**

(n) If *AEMO* notifies a *Registered Participant* of a rectification period under rule 4.15(i) and that *Registered Participant* considers that *AEMO* has not reasonably applied the criteria under rule 4.15(j) with respect to the rectification period, the *Registered Participant* may, no later than 20 *business days* from the day of receiving *AEMO's* notification on the rectification period, make an application to the *AER* requesting a review of *AEMO's* notification and the *Registered Participant's* reasons for a review.

(o) If the *AER* receives an application under rule 4.15(n), the *AER* must review the application, no later than 30 *business days* from receiving the application, and either:

(1) accept the rectification period determined by *AEMO*; or

(2) determine the rectification period on the *Registered Participant*,

and provide reasons in writing for its determination to the *Registered Participant*, *AEMO* and the relevant *Network Service Provider*.

(p) The *Registered Participant* must comply with any determination on the rectification period made under rule 4.15(o) from the day of receiving the *AER's* determination.

(q) If the *plant* of a *Registered Participant* remains operating in a manner that is in breach of a *performance standard* for a period greater than that determined in accordance with rule 4.15(i) or 4.15(o), *AEMO* must notify the *AER* and the relevant *Network Service Provider*.

4.16 Transitioning arrangements for establishment of performance standards

4.16.1 Definitions

In this rule 4.16 and in rule 4.17:

actual capability of an eligible plant in respect of a performance requirement means the capability of the eligible plant in relation to that performance requirement when it is being operated under normal conditions in accordance with *good electricity industry practice*.

agreed performance standard means a standard of performance that:

(a) is established as a result of that standard being accepted by *NEMMCO* in accordance with:

(1) the Old rule 4.14(d)(1); or

(2) clause 4.14(d)(1) of the National Electricity Code; and

(b) is in respect of a performance requirement.

Amending Rule means the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008.

deemed performance standard means a standard of performance that:

(a) is deemed to apply in accordance with**:**

(1) the Old rule 4.14(h); or

(2) clause 4.14(h) of the National Electricity Code; and

(b) is in respect of a performance requirement.

eligible plant means a *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* in relation to which:

(a) a person was registered as a *Generator* as at the *performance standards commencement date*; or

(b) a *connection agreement* applied as at the *performance standards commencement date*.

Generator notice means a notice given by a *Generator* to *NEMMCO* in accordance with clause 4.16.3(c).

Generator reply notice means a notice given by a *Generator* to *NEMMCO* in accordance with clause 4.16.3(k).

initiating party has the meaning given to it in clause 4.17.2(a).

mandatory standard means a standard of performance in respect of a performance requirement that is not the subject of a *minimum access standard* or an *automatic access standard*.

National Electricity Code means the code of conduct called the National Electricity Code approved, in accordance with section 6(1) of the Old National Electricity Law, as the initial Code for the purposes of that Law, and as amended from time to time in accordance with its terms and the Old National Electricity Law.

NEMMCO notice means a notice given by *NEMMCO* to a *Generator* in accordance with clause 4.16.3(d).

NEMMCO reply notice means a notice given by *NEMMCO* to a *Generator* in accordance with clause 4.16.3(i).

Old National Electricity Law means the Schedule to the National Electricity (South Australia) Act 1996 (SA) as in force from time to time before the commencement of section 12 of the National Electricity (South Australia) (New National Electricity Law) Amendment Act 2005 (SA).

Old rule 4.14(d)(1) means the rule 4.14(d)(1) in the version of the *Rules* which was in force immediately prior to the commencement of the Amending Rule.

Old rule 4.14(h) means the rule 4.14(h) in the version of the *Rules* which was in force immediately prior to the commencement of the Amending Rule**.**

performance requirement means in the case of:

(a) any *generating unit* (including a pumping generating unit) and *plant* associated with that *generating unit* – a requirement referred to in clause S5.2.5, S5.2.6, S5.2.8 or S5.2.9; and

(b) a pumping generating unit and *plant* associated with that pumping generating unit – a requirement referred to in clause S5.3.3, S5.3.5, S5.3.6, S5.3.7 or S5.3.8.

performance standard requirements means the requirements set out in clause 4.16.5(c).

performance standards committee means the committee established by *NEMMCO* under clauses 4.17.1.

performance standards expert means a person engaged by *NEMMCO* under clause 4.17.1(j).

pumping generating unit means a *generating unit* that can also operate as a hydro-electric pump.

receiving party has the meaning given to it in clause 4.17.2(a).

register means the register of *performance standards* established and maintained by *NEMMCO* under rule 4.14(n).

registered performance standard in respect of an eligible plant means a *performance standard* (including any agreed performance standard or deemed performance standard) that is included in the register as being applicable to that eligible plant and that is in respect of a performance requirement.

4.16.2 Exclusions

For the avoidance of doubt:

(a) this rule 4.16 does not apply in relation to any *performance standard* for an eligible plant where that *performance standard* applies to that eligible plant by virtue of clause 5.3.4A; and

(b) nothing in this rule 4.16 is to be taken to preclude a *performance standard* that applies to an eligible plant by virtue of those clauses being amended or replaced in accordance with the *Rules*, in which case the *performance standard* as so amended or replaced supersedes the *performance standard* that applies to that eligible plant by virtue of this rule 4.16 or rule 4.17 (as the case may be).

4.16.3 Notification and acceptance of performance standards

Agreement as to performance standards

(a) *NEMMCO* and a person who is registered as a *Generator* in relation to eligible plant may, at any time before 1 March 2007, agree to a performance standard in respect of a particular performance requirement that is to apply to that eligible plant without following the procedures set out in this clause 4.16.3, but that performance standard must be a standard which, based on the information available to *NEMMCO* at that time, is consistent with the performance standard requirements.

(b) A performance standard that is agreed under paragraph (a) is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

(c) If, as at 1 March 2007:

(1) *NEMMCO* is not required to include the performance standard in the register under paragraph (b); and

(2) *NEMMCO* and the *Generator* have not agreed that no performance standard in respect of the relevant performance requirement is to apply to that eligible plant,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard to a performance standards expert.

NEMMCO notice

(d) As soon as reasonably practicable but by no later than 29 December 2006, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that specifies:

(1) the registered performance standards that apply to all eligible plants in relation to which that *Generator* is so registered;

(2) which of those registered performance standards *NEMMCO* requires the *Generator* to renegotiate under clause 4.16.5(i) and in which case *NEMMCO* must also specify:

(i) the *power system security* issue that *NEMMCO* is seeking to address; and

(ii) the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard that *NEMMCO* considers is required to address that *power system security* issue; and

(3) where:

(i) a *performance standard* in respect of a particular performance requirement is not included in the register as being applicable to an eligible plant in relation to which that *Generator* is registered; and

(ii) *NEMMCO* considers that a performance standard in respect of that performance requirement should apply to that eligible plant,

that performance requirement.

Generator notice

(e) As soon as reasonably practicable but by no later than 5 January 2007, each person who is registered as a *Generator* in relation to any eligible plant must give to *NEMMCO* a written notice that specifies:

(1) each deemed performance standard in respect of a performance requirement which the *Generator* proposes as being applicable to any of its eligible plants, where that performance requirement is not the subject of a registered performance standard that applies to that eligible plant;

(2) those registered performance standards that apply to any of its eligible plant which the *Generator* requires *NEMMCO* to renegotiate under clause 4.16.5(k) – in which case the *Generator* must also specify:

(i) its best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and

(ii) the lower performance standard that it is proposing in respect of that performance requirement,

and must include with its notice information that supports its assessment of the actual capability of that eligible plant;

(3) where *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a power system security issue, the *Generator*'s best assessment of the

actual capability of that eligible plant in respect of that performance requirement - in which case the *Generator* must also include with its notice information that supports its assessment of that actual capability; and

(4) where:

(i) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); and

(ii) the *Generator* has not included in its notice a deemed performance standard in respect of that performance requirement that it considers applies to the eligible plant,

the performance standard (if any) that the *Generator* proposes in respect of that performance requirement.

(f) If:

(1) the *Generator* does not state in a *Generator* notice that it requires a registered performance standard that applies to an eligible plant to be renegotiated under clause 4.16.5(k), and *NEMMCO* has not specified that standard in a *NEMMCO* notice as a registered performance standard that is to be renegotiated under clause 4.16.5(i), that registered performance standard is to be taken as the *performance standard* in respect of the relevant performance requirement for that eligible plant; or

(2) the required actual capability of an eligible plant in respect of a performance requirement, as notified to the *Generator* under subparagraph (d)(2), is lower than or equal to the *Generator*'s best assessment of the actual capability of that eligible plant in respect of that performance requirement,

then:

(3) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and

(4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Provision of connection agreements

(g) Where:

(1) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies the actual capability of an eligible plant in respect of a performance requirement that *NEMMCO* considers is required to address a *power*

system security issue and the *performance standard* in respect of that performance requirement is not determined under subparagraphs (f)(2)-(4);

(2) *NEMMCO* has given the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3); or

(3) a *Generator* gives *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1) or a registered performance standard under subparagraph (e)(2),

and

(4) the *Generator* has not already provided to *NEMMCO* a copy of the current *connection agreement* that applies to the relevant eligible plant,

then the *Generator* must include with its *Generator* notice or if it does not give *NEMMCO* a *Generator* notice, provide to *NEMMCO* by no later than 5 January 2007, a copy of the current *connection agreement* that applies to the eligible plant.

(h) The copy of the *connection agreement* referred to in paragraph (g) may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

NEMMCO reply notice

(i) As soon as reasonably practicable but by no later than the performance standards agreement date, *NEMMCO* must give to each person who is registered as a *Generator* in relation to any eligible plant a written notice that states:

(1) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a deemed performance standard under subparagraph (e)(1), whether *NEMMCO* accepts the deemed performance standard as proposed by the *Generator*;

(2) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed lower performance standard under subparagraph (e)(2), whether *NEMMCO* accepts:

(i) the *Generator*'s assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and/or

(ii) the lower performance standard that has been proposed by the *Generator*;

(3) where:

(i) the *Generator* has given *NEMMCO* a *Generator* notice that, under subparagraph (e)(3), specifies the *Generator*'s best assessment of

the actual capability of the eligible plant in respect of a performance requirement; and

(ii) the required actual capability of the eligible plant in respect of that performance requirement, as notified to the *Generator* under subparagraph (d)(2), is higher than the *Generator*'s assessment of the actual capability referred to in paragraph (l),

whether *NEMMCO* accepts the *Generator*'s assessment;

(4) where the *Generator* has given *NEMMCO* a *Generator* notice that specifies a proposed performance standard under subparagraph (e)(4), whether *NEMMCO* accepts that performance standard; and

(5) where *NEMMCO* has given to the *Generator* a *NEMMCO* notice that specifies a performance requirement under subparagraph (d)(3) and the *Generator* has either:

(i) not proposed a performance standard under subparagraph (e)(4); or

(ii) not given a *Generator* notice to *NEMMCO*,

the performance standard (if any) that *NEMMCO* proposes for that purpose.

(j) If *NEMMCO* states in a *NEMMCO* reply notice that:

(1) it accepts a standard referred to in subparagraph (i)(1), (2) or (4), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant; or

(2) it accepts the *Generator*'s assessment of the actual capability of an eligible plant in respect of a performance requirement as included in a *Generator* notice under subparagraph (e)(3),

and the *Generator*'s assessment of that actual capability is lower than the required actual capability of the eligible plant in respect of that performance requirement as notified to the *Generator* under subparagraph (d)(2), then:

(3) the *Generator*'s assessment of the actual capability of that eligible plant as referred to above is to be taken as the *performance standard* in respect of that performance requirement for that eligible plant; and

(4) *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

Generator reply notice

(k) Where *NEMMCO* has given a *Generator* a *NEMMCO* reply notice that specifies a proposed performance standard under subparagraph (i)(5), that *Generator* must, as soon as reasonably practicable but by no later than 15 January 2007, give written notice to *NEMMCO* which states whether it accepts that performance standard.

(l) If the *Generator* states in a *Generator* reply notice that it accepts a standard referred to in paragraph (k), that standard is to be taken as the *performance standard* in respect of the relevant performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.4 Actual capability

(a) If *NEMMCO* notifies a *Generator* in a *NEMMCO* reply notice that it does not accept that the *Generator*'s assessment of the actual capability of an eligible plant in respect of a particular performance requirement, then:

(1) the *Generator* and *NEMMCO* must seek to agree the actual capability of that eligible plant in respect of that performance requirement, taking into account (among other things) the results of relevant tests, the records of the operation of the plant, engineering reports, information provided by *Network Service Providers*, manufacturers' reports and the specifications of the plant or of similar plant; and

(2) if, within 20 *business days* of the giving of the *NEMMCO* reply notice, the *Generator* and *NEMMCO* have not agreed the actual capability of that eligible plant in respect of that performance requirement:

(i) they must seek to agree to the tests or engineering assessments that are to be undertaken for the purpose of establishing that actual capability and the time by which such tests or engineering assessments are to be completed; and

(ii) if, within 30 *business days* of the giving of the reply notice, they have not agreed to the tests or engineering assessments that are to be undertaken, or the time by which they are to be undertaken, the tests or engineering assessments, and the time by which they are to be undertaken, must be as specified by the *AER* in writing to the *Generator* and *NEMMCO*, such specification to be made at the written request of either the *Generator* or *NEMMCO* within 40 *business days* of the giving of the *NEMMCO* reply notice.

(b) The *Generator* must use all reasonable endeavours, subject to complying with any other applicable provisions of the *Rules*, to have the tests or engineering assessments agreed or specified under subparagraph (a)(2) undertaken as agreed or specified and must promptly provide the results of such tests or engineering assessments to *NEMMCO*.

(c) The costs of undertaking the tests or engineering assessments and providing the results to *NEMMCO* as referred to in paragraph (b) must be borne by the *Generator*.

(d) This clause 4.16.4 does not apply where both the *Generator* and *NEMMCO* agree that there is no need to determine the actual capability of the eligible plant in respect of a particular performance requirement.

4.16.5 Criteria for, and negotiation of, performance standards

Restrictions on NEMMCO regarding performance standards

(a) *NEMMCO*:

(1) must, and must only, accept a deemed performance standard or a proposed performance standard under clause 4.16.3(i)(1), (2) or (4) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements;

(2) must not propose a performance standard under clause 4.16.3(i)(5) unless it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements,

and may only agree to a performance standard under clause 4.16.3(a)-(c) or as described in clause 4.17.3(f) if it is satisfied that, based on the information available to *NEMMCO* at that time, the standard is consistent with the performance standard requirements.

Preconditions to obligation to negotiate

(b) If:

(1) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a *Generator*'s assessment of the actual capability of an eligible plant in respect of a performance requirement, as referred to in clause 4.16.3(i)(3), and the *Generator* is required to renegotiate the relevant registered performance standard pursuant to paragraph (i);

(2) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a performance standard proposed by a *Generator*, as referred to in clause 4.16.3(i)(2), and *NEMMCO* is required to renegotiate the relevant registered performance standard pursuant to paragraph (k);

(3) *NEMMCO* does not state in a *NEMMCO* reply notice that it accepts a deemed performance standard or a proposed performance standard, as referred to in clause 4.16.3(i)(1) or (4); or

(4) a *Generator* does not state in a *Generator* reply notice that it accepts a proposed performance standard, as referred to in clause 4.16.3(k),

NEMMCO and the *Generator* must negotiate in good faith to agree the relevant performance standard in accordance with the performance standard requirements.

Criteria for performance standards

(c) Subject to paragraphs (e) and (f), a performance standard referred to in paragraph (a) or negotiated in accordance with paragraph (b) must be the least onerous of:

(1) in the case of a performance standard other than a performance standard referred to in subparagraph (b)(1), the technical characteristics set out in the relevant connection agreement, subject to the technical characteristics set out in any applicable derogation;

(2) the relevant *automatic access standard*;

(3) the relevant mandatory standard; and

(4) the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard as accepted by *NEMMCO* in a *NEMMCO* reply notice, agreed by *NEMMCO* and the *Generator*, established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), or determined by a performance standards expert.

(d) As a result of the application of paragraph (c), and notwithstanding anything else to the contrary in the *Rules*, the relevant performance standard may be less than the relevant *minimum access standard* or mandatory standard.

(e) The performance standard may be such other standard of performance as is agreed by *NEMMCO* and the *Generator* and as is higher than that which complies with the requirements set out in paragraphs (c) and (d).

(f) *NEMMCO* and the *Generator* may agree that a performance requirement is not applicable to an eligible plant, with the result that no *performance standard* in respect of that performance requirement is required for that eligible plant.

Provision of information

(g) For the purpose of facilitating the negotiations referred to in paragraph (b), the *Generator* must provide to *NEMMCO* as soon as reasonably practicable but by no later than 22 January 2007, a copy of the current *connection agreement* that applies to the relevant eligible plant and details of the design performance of the eligible plant.

(h) The obligation in paragraph (g) does not apply to the extent the *Generator* has already provided such documents and information to *NEMMCO* and the copy of the *connection agreement* may be altered in such a way as to mask any commercial arrangements and is *confidential information*.

When NEMMCO may require renegotiation of registered performance standard

(i) *NEMMCO* may only require a *Generator* to renegotiate a registered performance standard pursuant to a *NEMMCO* notice if:

(1) the registered performance standard is lower than what *NEMMCO* considers, based on the information available to it, to be the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard; and

(2) *NEMMCO* is satisfied that a higher performance standard in respect of that performance requirement is required to address a *power system security* issue.

(j) Notwithstanding paragraph (i), a *Generator* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is lower than the registered performance standard.

When Generator may require renegotiation of performance standard

(k) A *Generator* may only require *NEMMCO* to renegotiate a registered performance standard pursuant to a *Generator* notice if the registered performance standard is higher than the *Generator*'s best assessment of the actual capability of the eligible plant in respect of the performance requirement the subject of the registered performance standard.

(l) Notwithstanding paragraph (k), *NEMMCO* is not required to (but may nevertheless agree to) renegotiate a registered performance standard pursuant to that clause if the actual capability of that eligible plant in respect of the performance requirement as agreed by *NEMMCO* and the *Generator*, or as established in accordance with tests or engineering assessments agreed or specified under clause 4.16.4(a)(2), is higher than the registered performance standard.

Consequences of agreeing performance standard

(m) If *NEMMCO* and a *Generator* agree a performance standard in respect of a performance requirement for any eligible plant under this clause 4.16.5, that performance standard is to be taken as the *performance standard* in respect of that performance requirement for the eligible plant and *NEMMCO* must forthwith include that standard in the register as the performance standard in respect of that performance requirement for that eligible plant.

4.16.6 Consultation with and assistance by Network Service Providers

(a) Before *NEMMCO*:

(1) accepts or agrees to a performance standard under this rule 4.16 or as described in clause 4.17.3(d); or

(2) agrees that a performance requirement is not applicable to an eligible plant under clause 4.16.5(f),

NEMMCO must notify the *Network Service Provider* to whose network the relevant eligible plant is directly *connected* and give that *Network Service Provider* a reasonable opportunity to provide its views on that matter to *NEMMCO*.

(b) As soon as reasonably practicable after including a performance standard for an eligible plant in the register under this rule 4.16 or rule 4.17, *NEMMCO* must give written notice of that performance standard to the *Network Service Provider* to whose *network* that eligible plant is directly *connected*.

(c) If requested to do so by *NEMMCO* or a *Generator*, a *Network Service Provider* must use its reasonable endeavours to provide such assistance as is requested in connection with the proposal, negotiation, acceptance or agreement of a performance standard under this rule 4.16 or as described in clause 4.17.3(d).

4.16.7 Referral to expert determination

(a) If:

(1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;

(2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and

(3) as at 29 January 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

the *Generator* may give a written notice to *NEMMCO* (or *NEMMCO* may give a written notice to the *Generator*) of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

(b) If:

(1) in accordance with clause 4.16.5(b), *NEMMCO* and a *Generator* are required to negotiate to agree a performance standard in respect of a particular performance requirement for an eligible plant;

(2) *NEMMCO* and the *Generator* have not agreed under clause 4.16.5(f) that such a performance requirement is not applicable to that eligible plant; and

(3) as at 1 March 2007, *NEMMCO* is not required under clause 4.16.5(m) to include in the register a performance standard for that eligible plant that is in respect of that performance requirement,

NEMMCO must give a written notice to the *Generator* of its intention to refer the determination of the performance standard in respect of the performance requirement to a performance standards expert.

4.16.8 Prior actions

If the *AEMC*, the *AER*, *NEMMCO* or a *Registered Participant* takes any action to enable any entity to perform functions under, or obligations imposed by, this rule 4.16 or rule 4.17 before 7 December 2006 in anticipation of the relevant provision applying on the performance standards transition commencement date, and the action was taken so far as reasonably practicable in accordance with the provision (as though the provision applied at the time the relevant action was taken), then the action is deemed to have been validly taken in accordance with that provision with effect on and from 7 December 2006.

4.16.9 Deemed performance standards

A deemed performance standard for any eligible plant:

(a) that is in respect of a particular performance requirement; and

(b) that is included in the register as at the performance standards transition commencement date,

is to be taken to be the performance standard in respect of that performance requirement for that eligible plant for the purposes of the *Rules* unless it is subsequently amended or replaced in accordance with the *Rules*.

4.16.10 Modification of connection agreements

(a) Notwithstanding clause 5.2.2(c) and subject to paragraph (b), a *connection agreement* that applies to any eligible plant is to be taken to include:

(1) such *performance standards* for that eligible plant as are included in the register under this rule 4.16 or rule 4.17; and

(2) except to the extent they have been superseded by a *performance standard* referred to in subparagraph (1), such *performance standards* for that eligible plant as are included in the register as at the performance standards transition commencement date,

and those *performance standards* prevail over any other standards of performance that are included in that *connection agreement* to the extent of any inconsistency between them.

(b) Clause 4.16.10(a) does not apply to the extent a *performance standard* that is taken to be included in a *connection agreement* under that clause is subsequently amended or replaced in accordance with the *Rules*.

4.17 Expert determination

4.17.1 Performance standards committee and appointment of performance standards experts

(a) As soon as reasonably practicable but by no later than 10 January 2007, *NEMMCO* must establish a committee comprising six members (the '**performance standards committee**').

(b) The six members must consist of:

(1) two persons appointed to represent *NEMMCO*, one of whom is appointed as the chairperson of the committee;

(2) two persons appointed to represent *Generator*s; and

(3) two persons appointed to represent *Network Service Providers*.

(c) A decision of the performance standards committee to nominate a person as a performance standards expert must be made:

(1) at a meeting of the performance standards committee; and

(2) by at least two thirds of the number of members who attend the meeting.

(d) A quorum for a meeting of the performance standards committee consists of one member from each of the categories referred to in subparagraph (b)(1) to (3).

(e) The chairperson of the performance standards committee:

(1) is responsible for all procedural matters; and

(2) without limiting subparagraph (1), may determine that a member or members may participate in, and form any part of the quorum for, a meeting of the performance standards committee by telephone, closed circuit television or other means, but only if the member who speaks on any matter at that meeting can be heard by the other members at that meeting.

(f) If a member of the performance standards committee resigns or otherwise ceases to be able or available to perform the functions of a member for more than 2 consecutive meetings of the committee, *NEMMCO* must, as soon as reasonably practicable, appoint another person to replace that member.

(g) As soon as reasonably practicable after it is established, the performance standards committee must nominate at least two persons as performance standards experts.

(h) The performance standards committee must:

(1) from time to time nominate such number of persons as performance standards experts as is necessary to ensure that the number of performance standards experts at any time is no less than two; and

(2) at the request of *NEMMCO*, nominate such additional number of persons as performance standards experts as *NEMMCO* requires.

(i) If the performance standards committee:

(1) fails to nominate at least two persons as performance standards experts within 30 *business days* of the committee being established; or

(2) where the number of performance standards experts is reduced to less than two – fails, within 30 *business days* of such reduction occurring, to nominate such number of persons as performance standards experts as is necessary to restore the number of performance standards experts to two,

NEMMCO must request the *AER* in writing to nominate the requisite number of persons as performance standards experts and the *AER* must nominate that number of performance standards experts as soon as reasonably practicable.

(j) *NEMMCO* must engage a performance standards expert nominated under this clause 4.17.1 for the purpose of performing the functions of a performance standards expert under this rule 4.17.

(k) *NEMMCO* must notify the *AER* in writing of each performance standards expert that it engages under paragraph (j).

(l) The performance standards committee will cease to exist one month after 1 June 2007.

4.17.2 Referral to performance standards expert

(a) Where *NEMMCO* or a *Generator* gives a notice under clause 4.16.3(c) or clause 4.16.7 of its intention to refer the determination of a performance standard to a performance standards expert, the party giving the notice (the '**initiating party**') and the party to whom the notice is given (the '**receiving party**') must seek to agree on a performance standards expert to determine the performance standard.

(b) If:

(1) 5 *business days* from the giving of the notice under clause 4.16.3(c) or clause 4.16.7 (as the case may be) have elapsed; and

(2) the initiating party and the receiving party have not agreed on a performance standards expert to determine the performance standard,

then the initiating party or the receiving party may request the *AER* in writing to nominate a performance standards expert to determine the performance standard, in which case:

(3) the *AER* must make such nomination by notice in writing given to both the initiating party and the receiving party within 5 *business days* of the *AER* receiving the request to do so; and

(4) the nominated performance standards expert will determine the performance standard.

(c) Within 5 *business days* of the selection of the performance standards expert who will determine the performance standard, or within such longer time as the performance standards expert may agree, the initiating party and the receiving party must each give to the performance standards expert a written submission as to the performance standard they contend should be adopted and the reasons (together with supporting evidence) for that contention.

4.17.3 Determinations of performance standards experts

(a) The initiating party, the receiving party and any *Network Service Provider* required to do so by the performance standards expert must promptly supply the performance standards expert with any information, assistance and cooperation requested in writing by the performance standards expert in connection with its determination of a performance standard.

(b) The performance standards expert must determine the performance standard in accordance with the performance standard requirements. For these purposes the performance standards expert may, without limitation:

(1) determine the actual capability of the eligible plant in respect of the performance requirement the subject of the performance standard; or

(2) determine that a performance requirement is not applicable to the relevant eligible plant, with the result that no performance standard in respect of that performance requirement is required for that eligible plant.

(c) The performance standards expert must, as soon as reasonably practicable but no later than 1 June 2007, determine the performance standard and provide *NEMMCO* and the *Generator* with its written determination (including reasons).

(d) The performance standards expert must not determine a performance standard in respect of a performance requirement for an eligible plant if, prior to making that determination, *NEMMCO* and the *Generator* notify the expert in writing that they have agreed to the relevant performance standard.

(e) A performance standard in respect of a particular performance requirement that is:

(1) agreed as described in paragraph (d); or

(2) determined by a performance standards expert,

is to be taken as the performance standard in respect of that performance requirement for the relevant eligible plant and *NEMMCO* must forthwith include that standard in the register as the *performance standard* in respect of that performance requirement for that eligible plant.

(f) Not later than 1 July 2007, a performance standards expert must provide a summary of each determination it makes under this rule 4.17 to *NEMMCO* and *NEMMCO* must *publish* that summary as soon as is reasonably practicable.

(g) A summary under paragraph (f) must only include the following information:

(1) the name of the relevant *Generator*;

(2) the name or a description of the eligible plant; and

(3) the performance requirement that is the subject of the performance standard that has been determined by the performance standards expert for that eligible plant.

4.17.4 Other matters

(a) To the extent permitted by law, a performance standards expert is not liable for any loss, damage or liability suffered or incurred by a *Registered Participant* or any other person as a consequence of any act or omission of the performance standards expert that was done in good faith in connection with the determination of a performance standard.

(b) Before proceeding to determine a performance standard, a performance standards expert may require the initiating party and the receiving party to execute a release and indemnity in relation to any loss, damage or liability that the performance standards expert might, but for the release and indemnity, suffer or incur as a consequence of any act or omission of the performance standards expert that was done in good faith in connection with the determination of the performance standard.

(c) As part of its engagement by *NEMMCO*, a performance standards expert must enter into a confidentiality deed with *NEMMCO*, for the benefit of *NEMMCO* and each *Generator* in respect of which the performance standards expert determines a performance standard, under which it undertakes to keep confidential all information provided to it for the purposes of determining any performance standard except to the extent that the disclosure of such information is necessary for the purposes of the summary referred to in clause 4.17.3(f).

(d) The costs of the performance standards expert must be borne equally as between *NEMMCO* and National Generators Forum Limited (ACN 113 331 623).

CHAPTER 5

5. Network Connection

5.1 Statement of Purpose

5.1.1 [Deleted]

5.1.2 Purpose

(a) This Chapter*:*

(1) provides the framework for *connection* to a *transmission network* or a *distribution network* and access to the *national grid*; and

(2) has the following aims:

(i) to detail the principles and guidelines governing *connection* and access to a *network*;

(ii) to establish the process to be followed by a *Registered Participant* or a person intending to become a *Registered Participant* for establishing or modifying a *connection* to a *network* or for altering *generating plant connected* to a *network*;

(iii) to address a *Connection Applicant's* reasonable expectations of the level and standard of *power transfer capability* that the relevant *network* should provide; and

(iv) to establish processes to ensure ongoing compliance with the technical requirements of this Chapter to facilitate management of the *national grid*.

(b) Any person who is not a *Registered Participant* may agree with a *Network Service Provider* to comply with this Chapter as part of a *connection agreement*.

(c) Nothing in the *Rules* is to be read or construed as preventing any person from constructing any *network* or *connection assets*.

(d) Subject to paragraphs (e) and (g), the following *Rules* apply in the application of this Chapter to *transmission services* provided by means of, or in connection with, the *declared transmission system* of an *adoptive jurisdiction*:

(1) a reference to a *Network Service Provider* is, in relation to the provision of *connection services*, to be read as a reference to a *declared transmission system operator*; and

(2) a reference to a *Network Service Provider* is, in relation to the provision of *shared transmission services*, to be read as a reference to *AEMO*.

(e) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*:

(1) clause 5.2.3(b);

(2) clause 5.6.1;

(3) clause 5.6.2;

(4) clause 5.6.2A (except 5.6.2A(b)(2));

(5) clause 5.7.6;

(6) clause 5.7.7 (except 5.7.7(c));

(7) Schedule 5.1, clause S5.1.2.3;

(8) Schedule 5.3 clause S5.3.5.

(f) A reference in any of the following provisions to a *Transmission Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to *AEMO*:

(1) clause 5.6.6;

(2) clause 5.6.6A;

(3) clause 5.6.6B;

(g) A reference in any of the following provisions to a *Network Service Provider* will, in relation to the *declared transmission system* of an *adoptive jurisdiction*, be construed as a reference to the relevant *declared transmission system operator*:

(1) clause 5.2.3(d)(12), (e) and (e1)(except 5.2.3(e1)(2));

(2) clause 5.3.4A(c) and (d);

(3) clause 5.9.3;

(4) clause 5.9.4;

(5) clause 5.9.6;

(6) Schedule 5.1, clause S5.1.10.3(a);

(7) Schedule 5.2 clause S5.2.3(a)(8).

5.1.3 Principles

This Chapter is based on the following principles relating to *connection* to the *national grid*:

(a) all *Registered Participants* should have the opportunity to form a *connection* to a *network* and have access to the *network services* provided by the *networks* forming part of the *national grid*;

(b) the terms and conditions on which *connection* to a *network* and provision of *network service* is to be granted are to be set out in commercial agreements on reasonable terms entered into between a *Network Service Provider* and other *Registered Participants*;

(c) the technical terms and conditions of *connection agreements* regarding standards of performance must be established at levels at or above the *minimum access standards* set out in schedules 5.1, 5.2, 5.3 and 5.3a, with the objective of ensuring that the *power system* operates securely and reliably and in accordance with the *system standards* set out in schedule 5.1a;

(d) a *Registered Participant* or person intending to become a *Registered Participant* may request *connection* of a facility, modification of a *connection*, or alteration of *connected plant* at a standard below an *automatic access standard* if the *connection*, modification to the *connection*, or alteration of *connected plant* does not adversely affect:

(1) *power system security*; and

(2) the quality of *supply* to other *Network Users*;

(e) in some jurisdictions separate agreements may be required for *connection services* and *use of system services*; and

(f) the operation of the *Rules* should result in the achievement of:

(1) long term benefits to *Registered Participants* in terms of cost and *reliability* of the *national grid*; and

(2) open communication and information flows relating to *connections* between *Registered Participants* themselves, and between *Registered Participants* and *AEMO*, while ensuring the security of *confidential information* belonging to competitors in the *market*.

5.2 Obligations

5.2.1 Obligations of Registered Participants

(a) All *Registered Participants* must maintain and operate (or ensure their authorised *representatives* maintain and operate) all equipment that is part of their *facilities* in accordance with:

(1) relevant laws;

(2) the requirements of the Rules; and

(3) *good electricity industry practice* and applicable *Australian Standards*.

(b) All *Registered Participants* must ensure that the *connection agreements* to which they are a party require the provision and maintenance of all required *facilities* consistent with *good electricity industry practice* and must operate their equipment in a manner:

(1) to assist in preventing or controlling instability within the *power system*;

(2) comply with the minimum standards *published* pursuant to clause 3.11.4(c);

(3) to assist in the maintenance of, or restoration to, a *satisfactory operating state* of the *power system*; and

(4) to prevent uncontrolled separation of the *power system* into isolated *regions* or partly combined *regions, intra-regional transmission* break-up, or *cascading outages*, following any *power system* incident.

5.2.2 Connection agreements

(a) If requested to do so by a *Transmission Network User*, *Distribution Network User*, *AEMO* or the *AER*, a *Network Service Provider* and a *Transmission Network User* or *Distribution Network User* (as the case may be) must document the terms of any *network connection* arrangements made prior to 13 December 1998 and the resulting document will then be deemed to be a *connection agreement* for the purposes of the *Rules*.

(b) The *Rules* apply to:

(1) *connection agreements* made after 13 December 1998;

(2) deemed *connection agreements* under paragraph (a); and

(3) requests to establish *connection* after 13 December 1998.

(c) This Chapter is neither intended to have, nor is it to be read or construed as having, the effect of:

(1) altering any of the terms of a *connection agreement*; or

(2) altering the contractual rights or obligations of any of the parties under the *connection agreement* as between those parties; or

(3) relieving the parties under any such *connection agreement* of their contractual obligations under such an *agreement*.

(d) Notwithstanding the provisions of clause 5.2.2(c), if any obligation imposed or right conferred on a *Registered Participant* by this Chapter is inconsistent with the terms of a *connection agreement* to which the *Rules* apply and the application of the inconsistent terms of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users,* the parties to the *connection agreement* must observe the provisions of this Chapter as if they prevail over the *connection agreement* to the extent of the inconsistency.

5.2.3 Obligations of network service providers

(a) To be registered by *AEMO* as a *Network Service Provider*, a person must satisfy the relevant requirements specified in Chapter 2 and submit an application to *AEMO* in such form as *AEMO* may require.

(b) A *Network Service Provider* must comply with the *power system* performance and quality of *supply* standards:

(1) described in schedule 5.1;

(2) in accordance with any *connection agreement* with a *Registered Participant*,

and if there is an inconsistency between schedule 5.1 and such a *connection agreement*:

(3) if compliance with the relevant provision of the *connection agreement* would adversely affect the quality or security of *network service* to other *Network Users,* schedule 5.1 is to prevail;

(4) otherwise the *connection agreement* is to prevail.

(c) Where the provisions of the *connection agreement* vary the technical requirements set out in the schedules to this Chapter, the relevant *Network Service Provider* must report on such variations to *AEMO* on an annual basis. *AEMO* must allow access to such information to all other *Network Service Providers* and the *Network Service Providers* must keep such information confidential.

(d) A *Network Service Provider* must:

(1) review and process *applications to connect* or modify a *connection* which are submitted to it and must enter into a *connection agreement* with each *Registered Participant* and any other person to which it has provided a *connection* in accordance with rule 5.3 to the extent that the *connection point* relates to its part of the *national grid*;

(1A) co-operate with any other *Network Service Provider* who is processing a *connection* enquiry or *application to connect* to allow that *connection* enquiry or *application to connect* to be processed expeditiously and in accordance with rule 5.3;

(2) ensure that, to the extent that a *connection point* relates to its part of the *national grid*, every arrangement for *connection* with a *Registered Participant* or any other arrangement involving a *connection agreement* with that *Network Service Provider* complies with all relevant provisions of the *Rules*;

(3) co-ordinate the design aspects of equipment proposed to be *connected* to its *networks* with those of other *Network Service Providers* in accordance with rule 5.4 in order to seek to achieve *power system* performance requirements in accordance with schedule 5.1;

(4) together with other *Network Service Providers*, arrange for and participate in planning and development of their *networks* and *connection points* on or with those *networks* in accordance with rule 5.6;

(5) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;

(6) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to its *network* in accordance with rule 5.8;

(7) advise a *Registered Participant* or other person with whom there is a *connection agreement* upon request of any expected interruption characteristics at a *connection point* on or with its *network* so that the *Registered Participant* or other person may make alternative arrangements for *supply* during such interruptions, including negotiating for an alternative or backup *connection*;

(8) use its reasonable endeavours to ensure that modelling data used for planning, design and operational purposes is complete and accurate and order tests in accordance with rule 5.7 where there are reasonable grounds to question the validity of data;

(9) provide to *AEMO* and other *Network Service Providers* all data available to it and reasonably required for modelling the static and *dynamic performance* of the *power system*;

(10) forward to *AEMO* and other *Network Service Providers* subsequent updates of the data referred to in clause 5.2.3(d)(9) and, to the best of its ability and knowledge, ensure that all data used for the purposes referred to in rule 5.3 is consistent with data used for such purposes by other *Network Service Providers*;

(11) provide to *AEMO* the information required from *Generators* under schedule 5.2 and from *Customers* under schedule 5.3 and from *Market Network Service Providers* under schedule 5.3a in relation to a *connection agreement* and details of any *connection points* with other *Network Service Providers*; and

(12) where *network augmentations*, setting changes or other technical issues arise which could impact across *regional* boundaries, provide *AEMO* with a written report on the impact and its effects.

(e) A *Network Service Provider* must arrange for operation of that part of the *national grid* over which it has control in accordance with instructions given by *AEMO*.

(e1) A *Network Service Provider* must, except in so far as its *market network services* and parts of its *network* which are used solely for the provision of *market network services* are concerned, arrange for:

(1) management, maintenance and operation of its part of the *national grid* such that, in the *satisfactory operating state*, electricity may be transferred continuously at a *connection point* on or with its *network* up to the *agreed capability*;

(2) operation of its *network* such that the fault level at any *connection point* on or with that *network* does not exceed the limits that have been specified in a *connection agreement*;

(3) management, maintenance and operation of its *network* to minimise the number of interruptions to *agreed capability* at a *connection point* on or with that *network* by using *good electricity industry practice*; and

(4) restoration of the *agreed capability* at a *connection point* on or with that *network* as soon as reasonably practicable following any interruption at that *connection point*.

(f) A *Network Service Provider* must comply with *applicable regulatory instruments*.

(g) Each *Network Service Provider* must in respect of new or altered equipment owned, operated or controlled by it for the purpose of providing a *market network service*:

(1) submit an *application to connect* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being connected to the *network* of that *Network Service Provider* or altered (as the case may be);

(2) comply with the reasonable requirements of *AEMO* and the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.4 and schedule 5.3a;

(3) provide forecast information to the relevant *Network Service Provider* in accordance with rule 5.6;

(4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;

(5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and

(6) **[Deleted]**

(7) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

(h) **[Deleted]**

(h1) **[Deleted]**

(h2) **[Deleted]**

(h3) **[Deleted]**

(i) This Chapter is neither intended to require, nor is it to be read or construed as having the effect of requiring, a *Network Service Provider* to permit *connection* to or to *augment* any part of its *network* which is solely used for the provision of *market network services.*

5.2.4 Obligations of customers

(a) Each *Customer* must plan and design its *facilities* and ensure that its *facilities* are operated to comply with:

(1) its *connection agreement* with a *Network Service Provider*;

(2) subject to clause 5.2.4(a)(1), all applicable *performance standards*; and

(3) subject to clause 5.2.4(a)(2), the *system standards.*

(b) A *Customer* must:

(1) submit an *application to connect* in respect of new or altered equipment owned, operated or controlled by the *Customer* and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that equipment being *connected* to the *network* of that *Network Service Provider* or altered (as the case may be);

(2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of equipment proposed to be *connected* to the *network* of that *Network Service Provider* in accordance with rule 5.4 and schedule 5.3;

(3) provide *load* forecast information to the relevant *Network Service Provider* in accordance with rule 5.6;

(4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;

(5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and

(6) **[Deleted]**

(7) give notice of any intended voluntary permanent *disconnection* in accordance with rule 5.9.

5.2.5 Obligations of Generators

(a) A *Generator* must plan and design its *facilities* and ensure that they are operated to comply with:

(1) the *performance standards* applicable to those *facilities*;

(2) subject to subparagraph (1), its *connection agreement* applicable to those *facilities*; and

(3) subject to subparagraph (2), the *system standards*.

(b) A *Generator* must:

(1) submit an *application to connect* in respect of new *generating plant* owned, operated or controlled by the *Generator,* or to be owned, operated or controlled by the *Generator*, and enter into a *connection agreement* with a *Network Service Provider* in accordance with rule 5.3 prior to that *generating plant* being *connected* to the *network* of that provider;

(2) comply with the reasonable requirements of the relevant *Network Service Provider* in respect of design requirements of *generating plant* proposed to be *connected* to the *network* of that provider in accordance with rule 5.4 and schedule 5.2;

(3) provide *generation* forecast information to the relevant *Network Service Provider* in accordance with rule 5.6;

(4) permit and participate in inspection and testing of *facilities* and equipment in accordance with rule 5.7;

(5) permit and participate in commissioning of *facilities* and equipment which are to be *connected* to a *network* for the first time in accordance with rule 5.8; and

(6) give notice of intended voluntary permanent *disconnection* in accordance with rule 5.9.

5.3 Establishing or Modifying Connection

5.3.1 Process and procedures

(a) For the purposes of this rule 5.3:

establish a connection includes modify an existing *connection* or alter *plant* but does not include alterations to *generating plant* in the circumstances set out in clause 5.3.9.

(b) A *Registered Participant* or person intending to become a *Registered Participant* who wishes to establish a *connection* to a *network* must follow the procedures in this rule 5.3.

(c) Any person wishing to establish a *connection* to a *network* may elect to follow the procedures in this rule 5.3.

(d) A *Generator* wishing to alter *connected generating plant* must comply with clause 5.3.9.

5.3.2 Connection enquiry

(a) A person referred to in clause 5.3.1(b) or (c) who wishes to make an *application to connect* must first make a *connection* enquiry by advising the *Local Network Service Provider* of the type, magnitude and timing of the proposed *connection* to that provider's *network.*

(b) If the information submitted with a *connection* enquiry is inadequate to enable the *Local Network Service Provider* to process the enquiry the provider must within 5 *business days*, advise the *Connection Applicant* what other relevant preliminary information of the kind listed in schedule 5.4 is required before the *connection* enquiry can be further processed.

(c) The *Local Network Service Provider* must advise the *Connection Applicant* within 10 *business days* of receipt of the *connection* enquiry and the further information required in accordance with paragraph (b) if the enquiry would be more appropriately directed to another *Network Service Provider*.

(d) The *Connection Applicant,* notwithstanding the advice received under paragraph (c), may if it is reasonable in all the circumstances, request the *Local Network Service Provider* to process the *connection* enquiry and the provider must meet this request.

(e) Where the *Local Network Service Provider* considers that the *connection* enquiry should be jointly examined by more than one *Network Service Provider*, with the agreement of the *Connection Applicant,* one of those *Network Service Providers* may be allocated the task of liaising with the *Connection Applicant* and the other *Network Service Providers* to process and respond to the enquiry.

(f) A *Network Service Provider* must to the extent that it holds technical information necessary to facilitate the processing of a *connection* enquiry made in accordance with paragraph (a) or an *application to connect* in accordance with clause 5.3.4(a), provide that information to the *Connection Applicant* in accordance with the relevant requirements of schedule 5.1, 5.2, 5.3 or 5.3a.

5.3.3 Response to connection enquiry

(a) In preparing a response to a *connection* enquiry, the *Network Service Provider* must liaise with other *Network Service Providers* with whom it has *connection agreements*, if the *Network Service Provider* believes, in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected. The *Network Service Provider* responding to the *connection* enquiry may include in that response the reasonable requirements of any such other *Network Service Providers* for information to be provided by the *Connection Applicant*.

(b) The *Network Service Provider* must:

(1) within 10 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or

(2) within 10 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d),

provide the following information in writing to the *Connection Applicant*:

(3) the identity of other parties that the *Network Service Provider* considers:

(i) will need to be involved in planning to make the *connection* or must be involved under clause 5.3.5(e); and

(ii) must be paid for *transmission services* or *distribution services* in the appropriate jurisdiction;

(4) whether it will be necessary for any of the parties identified in subparagraph (3) to enter into an agreement with the *Connection Applicant* in respect of the provision of *connection* or other *transmission services* or *distribution services* or both, to the *Connection Applicant*;

(5) whether any service the *Network Service Provider* proposes to provide is *contestable* in the relevant *participating jurisdiction*; and

(6) a *preliminary program* showing proposed milestones for *connection* and access activities which may be modified from time to time by agreement of the parties, where such agreement must not be unreasonably withheld.

(b1) The *Network Service Provider* must:

(1) within 20 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b); or

(2) within 20 *business days* after receipt of a request from the *Connection Applicant* to the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d),

provide the *Connection Applicant* with the following written details of each technical requirement relevant to the proposed *plant*:

(3) the *automatic access standards*;

(4) the *minimum access standards*;

(5) the applicable *plant standards*;

(6) the *negotiated access standards* that will require *AEMO's* involvement in accordance with clause 5.3.4A(c); and

(7) the *normal voltage* level, if that is to change from the *nominal voltage* level.

(b2) A *Registered Participant*, *AEMO* or *interested party* may request the *Reliability Panel* to determine whether, in respect of one or more technical requirements for access, an existing Australian or international standard, or a part thereof, may be adopted as a *plant standard* for a particular class of *plant*.

(b3) Where, in respect of a technical requirement for access, the *Reliability Panel* determines a *plant standard* for a particular class of *plant* in accordance with clause 8.8.1(a)(8) as an acceptable alternative to a particular *minimum access standard* or *automatic access standard*, a *plant* which meets that *plant standard* is deemed to meet the applicable *automatic access standard* or *minimum access standard* for that technical requirement.

(b4) In making a determination in accordance with clause 5.3.3(b2) the *Reliability Panel* must consult *Registered Participants* and *AEMO* using the *Rules consultation procedures*.

(c) Within 20 *business days* after receipt of the *connection* enquiry and all such additional information (if any) advised under clause 5.3.2(b) or, if the *Connection Applicant* has requested the *Local Network Service Provider* to process the *connection* enquiry under clause 5.3.2(d), within 20 *business days* after receipt of that request, the *Network Service Provider* must provide to the *Connection Applicant* written advice of all further information which the *Connection Applicant* must prepare and obtain in conjunction with the *Network Service Provider* to enable the *Network Service Provider* to assess an *application to connect* including:

(1) details of the *Connection Applicant's connection* requirements, and the *Connection Applicant's* specifications of the *facility* to be connected, consistent with the requirements advised in accordance with clause 5.3.3(b1);

(2) details of the *Connection Applicant's* reasonable expectations of the level and standard of service of *power transfer capability* that the *network* should provide;

(3) a list of the technical data to be included with the *application to connect*, which may vary depending on the *connection* requirements and the type, rating and location of the *facility* to be *connected* and will generally be in the nature of the information set out in

schedule 5.5 but may be varied by the *Network Service Provider* as appropriate to suit the size and complexity of the proposed *facility* to be *connected*;

(4) commercial information to be supplied by the *Connection Applicant* to allow the *Network Service Provider* to make an assessment of the ability of the *Connection Applicant* to satisfy the prudential requirements set out in rules 6.6 and 6.7;

(5) the amount of the application fee which is payable on lodgement of an *application to connect*, such amount not being more than necessary to:

(i) cover the reasonable costs of all work anticipated to arise from investigating the *application to connect* and preparing the associated offer to *connect*; and

(ii) meet the reasonable costs anticipated to be incurred by *AEMO* and other *Network Service Providers* whose participation in the assessment of the *application to connect* will be required; and

(6) any other information relevant to the submission of an *application to connect*.

5.3.4 Application for connection

(a) A person who has made a *connection* enquiry under clause 5.3.2 may, following receipt of the responses under clause 5.3.3, make an *application to connect* in accordance with this clause 5.3.4 and clause 5.3.4A.

(b) To be eligible for *connection,* the *Connection Applicant* must submit an *application to connect* containing the information specified in clause 5.3.3(c) and the relevant application fee to the relevant *Network Service Provider*.

(c) The *Connection Applicant* may submit *applications to connect* to more than one *Network Service Provider* in order to receive additional offers to *connect* in respect of *facilities* to be provided that are *contestable*.

(d) To the extent that an application fee includes amounts to meet the reasonable costs anticipated to be incurred by any other *Network Service Providers* or *AEMO* in the assessment of the *application to connect*, a *Network Service Provider* who receives the *application to connect* and associated fee must pay such amounts to the other *Network Service Providers* or *AEMO*, as appropriate.

(e) For each technical requirement where the proposed arrangement will not meet the *automatic access standards* nominated by the *Network Service Provider* pursuant to clause 5.3.3(b1), the *Connection Applicant* must

submit with the *application to connect* a proposal for a *negotiated access standard* for each such requirement to be determined in accordance with clause 5.3.4A.

(f) The *Connection Applicant* may:

(1) lodge separate *applications to connect* and separately liaise with the other *Network Service Providers* identified in clause 5.3.3(b) who may require a form of agreement; or

(2) lodge one *application to connect* with the *Network Service Provider* who processed the *connection* enquiry and require it to liaise with those other *Network Service Providers* and obtain and present all necessary draft agreements to the *Connection Applicant*.

5.3.4A Negotiated access standards

(a) For the purposes of this clause 5.3.4A:

AEMO advisory matter means a matter that relates to *AEMO's* functions under the *National Electricity Law* and a matter in which *AEMO* has a role in schedules 5.1a, 5.1, 5.2, 5.3 and 5.3a.

(b) A *negotiated access standard* must:

(1) be no less onerous than the corresponding *minimum access standard* provided by the *Network Service Provider* under clause 5.3.3(b1)(4);

(2) be set at a level that will not adversely affect *power system security*;

(3) be set at a level that will not adversely affect the quality of *supply* for other *Network Users*; and

(4) in respect of *generating plant*, meet the requirements applicable to a *negotiated access standard* in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8.

(c) A *Network Service Provider* must following the receipt of a proposed *negotiated access standard* under clause 5.3.4(e) or paragraph (h), consult with *AEMO* as soon as practicable in relation to *AEMO* advisory matters for that proposed standard.

(d) *AEMO* must within 20 *business days* following the submission of a proposed *negotiated access standard* under clause 5.3.4(e) or paragraph (h)(3), respond to the *Network Service Provider* in writing in respect of any *AEMO* advisory matters.

(e) A *Network Service Provider* must within 30 *business days* following the receipt of a proposed *negotiated access standard* in accordance with clause

5.3.4(e) or paragraph (h)(3), accept or reject a proposed *negotiated access standard*.

(f) The *Network Service Provider* must reject the proposed *negotiated access standard* if that *connection*, or alteration of the *generating plant* (as the case may be), at the *negotiated access standard* proposed by the *Connection Applicant* would:

(1) on *AEMO's* reasonable advice, adversely affect *power system security*;

(2) in the *Network Service Provider's* reasonable opinion, adversely affect quality of *supply* for other *Network Users*;

(3) in the reasonable opinion of *AEMO* or the *Network Service Provider,* in respect of a *AEMO* advisory matter or a matter allocated to the *Network Service Provider,* respectively, be lower than the corresponding *minimum access standard*; or

(4) in respect of *generating plant*, in *AEMO's* reasonable opinion, not satisfy paragraph (b)(4).

(g) If a *Network Service Provider* rejects a proposed *negotiated access standard*, the *Network Service Provider* must when rejecting the proposed *negotiated access standard*, advise the *Connection Applicant* of a *negotiated access standard* that the *Network Service Provider* will accept.

(h) The *Connection Applicant* may in relation to a proposed *negotiated access standard* advised by a *Network Service Provide*r in accordance with paragraph (g):

(1) accept the proposed *negotiated access standard*;

(2) reject the proposed *negotiated access standard*;

(3) propose an alternative *negotiated access standard* to be further evaluated in accordance with the criteria in paragraph (b); or

(4) elect to adopt the relevant *automatic access standard* or a corresponding *plant standard*.

(i) An *automatic access standard* or if the procedures in this clause 5.3.4A have been followed a *negotiated access standard*, that forms part of the terms and conditions of a *connection agreement*, is taken to be the *performance standard* applicable to the *connected plant* for the relevant technical requirement.

5.3.5 Preparation of offer to connect

(a) The *Network Service Provider* to whom the *application to connect* is submitted:

(1) at the *automatic access standard* under clause 5.3.4; or

(2) at a *negotiated access standard* that the provider has accepted under clause 5.3.4A(e),

must proceed to prepare an offer to *connect* in response.

(b) The *Network Service Provider* must use its reasonable endeavours to advise the *Connection Applicant* of all risks and obligations in respect of the proposed *connection* associated with planning and environmental laws not contained in the *Rules.*

(c) The *Connection Applicant* must provide such other additional information in relation to the *application to connect* as the *Network Service Provider* reasonably requires to assess the technical performance and costs of the required *connection* and to enable the *Network Service Provider* to prepare an offer to *connect*.

(d) So as to maintain levels of service and quality of *supply* to existing *Registered Participants* in accordance with the *Rules*, the *Network Service Provider* in preparing the offer to *connect* must consult with *AEMO* and other *Registered Participants* with whom it has *connection agreements*, if the *Network Service Provider* believes in its reasonable opinion, that compliance with the terms and conditions of those *connection agreements* will be affected, in order to assess the *application to connect* and determine:

(1) the technical requirements for the equipment to be *connected*;

(2) the extent and cost of *augmentations* and changes to all affected *networks*;

(3) any consequent change in *network service* charges; and

(4) any possible material effect of this new *connection* on the *network power transfer capability* including that of other *networks*.

(e) If the *application to connect* involves the *connection* of *generating units* having a *nameplate rating* of 10 MW or greater to a *distribution network*, the *Distribution Network Service Provider* must consult the relevant *Transmission Network Service Provider* regarding the impact of the *connection* contemplated by the *application to connect* on fault levels, line reclosure protocols, and stability aspects.

(f) The *Transmission Network Service Provider* consulted under paragraph (e) must determine the reasonable costs of addressing those matters for inclusion in the offer to *connect* and the *Distribution Network Service Provider* must make it a condition of the offer to *connect* that the *Connection Applicant* pay these costs.

(g) The *Network Service Provider* preparing the offer to *connect* must include provision for payment of the reasonable costs associated with *remote control equipment* and *remote monitoring equipment* as required by *AEMO* and it may be a condition of the offer to *connect* that the *Connection Applicant* pay such costs.

5.3.6 Offer to connect

(a) Subject to clause 5.3.3(b)(6), the *Network Service Provider* processing the *application to connect* must make an offer to *connect* the *Connection Applicant's facilities* to the *network* within the time period specified in the *preliminary program*.

(a1) The *Network Service Provider* may amend the time period referred to in clause 5.3.6(a) to allow for any additional time taken in excess of the period allowed in the *preliminary program* for the negotiation of *negotiated access standards* in accordance with clause 5.3.4A.

(b) The offer to *connect* must contain the proposed terms and conditions for *connection* to the *network* including:

(1) for each technical requirement identified by the *Network Service Provider* under clause 5.3.3(b1), the *automatic access standard* or the *negotiated access standard* as determined in accordance with clauses 5.3.4 and 5.3.4A; and

(2) the terms and conditions of the kind set out in schedule 5.6,

and must be capable of acceptance by the *Connection Applicant* so as to constitute a *connection agreement.*

(b1) The proposed terms and conditions detailed in the offer to *connect* must be no lower than the applicable *minimum access standards*.

(c) The offer to *connect* must be fair and reasonable and must be consistent with the safe and *reliable* operation of the *power system* in accordance with the *Rules*. Without limitation, unless the parties otherwise agree, to be fair and reasonable an offer to *connect* must offer *connection* and *network services* consistent with schedule 5.1 and (as applicable) schedules 5.2, 5.3 and 5.3a and must not impose conditions on the *Connection Applicant* which are more onerous than those contemplated in schedules 5.1, 5.2, 5.3 or 5.3a.

(c1) An offer to *connect* and the resulting *connection agreement* must be consistent with any minimum standards set by *AEMO* under clause 3.11.4(b)(1).

(d) The *Network Service Provider* must use its reasonable endeavours to provide the *Connection Applicant* with an offer to *connect* in accordance with the reasonable requirements of the *Connection Applicant*, including without limitation, the location of the proposed *connection point* and the level and standard of *power transfer capability* that the *network* will provide.

(e) An offer to *connect* may contain options for *connection* to a *network* at more than one point in a *network* and/or at different levels of service and with different terms and conditions applicable to each *connection point* according to the different characteristics of *supply* at each *connection point*.

(f) Both the *Network Service Provider* and the *Connection Applicant* are entitled to negotiate with each other in respect of the provision of *connection* and any other matters relevant to the provision of *connection* and, if negotiations occur, the *Network Service Provider* and the *Connection Applicant* must conduct such negotiations in good faith.

(g) An offer to *connect* must define the basis for determining *transmission service* charges in accordance with Chapter 6A, including the prudential requirements set out in that Chapter.

(h) An offer to *connect* must define the basis for determining *distribution service* charges in accordance with Chapter 6, including the prudential requirements set out in Part K of Chapter 6.

(i) An offer to *connect* in respect of a *transmission network* must conform with the access arrangements set out in rule 5.4A.

(j) An offer to *connect* in respect of a *distribution network* made to an *Embedded Generator* or a *Market Network Service Provider*, must conform with the relevant access arrangements set out in rule 5.5.

(k) Nothing in the *Rules* is to be read or construed as imposing an obligation on a *Network Service Provider* to effect an extension of a *network* unless that extension is required to effect or facilitate the *connection* of a *Connection Applicant* and the *connection* is the subject of a *connection agreement.*

5.3.7 Finalisation of connection agreements

(a) If a *Connection Applicant* wishes to accept an offer to *connect*, the *Connection Applicant* must negotiate and enter into a *connection agreement* with each relevant *Network Service Provider* identified in accordance with clauses 5.3.3(b)(3) and (4) and in doing so must use its reasonable

endeavours to negotiate in good faith with all parties with which the *Connection Applicant* must negotiate such a *connection agreement*.

(b) The *connection agreement* must include proposed *performance standards* with respect to each of the technical requirements identified in schedules 5.2, 5.3 and 5.3a and each proposed *performance standard* must have been established in accordance with the relevant technical requirement.

(c) The proposed *performance standards* must be based on the *automatic access standard* or, if the procedures in clause 5.3.4A have been followed, the *negotiated access standard*.

(d) The provision of *connection* by any *Network Service Provider* may be made subject to gaining environmental and planning approvals for any necessary *augmentation* or *extension* works to a *network*.

(e) Where permitted by the applicable law in the relevant *participating jurisdiction*, the *connection agreement* may assign responsibility to the *Connection Applicant* for obtaining the approvals referred to in paragraph (d) as part of the project proposal and the *Network Service Provider* must provide all reasonable information and may provide reasonable assistance for a reasonable fee to enable preparation of applications for such approvals.

(f) Subject to paragraph (e), each *connection agreement* must be based on the offer to *connect* as varied by agreement between the parties.

(g) The *Network Service Provider* responsible for the *connection point* and the *Registered Participant* must jointly notify *AEMO* that a *connection agreement* has been entered into between them and forward to *AEMO* relevant technical details of the proposed *plant* and *connection*, including as applicable:

(1) details of all *performance standards* that form part of the terms and conditions of the *connection agreement*;

(2) if a *Generator*, the arrangements for updating the information required under clause S5.2.4(b);

(3) the proposed *metering installation*;

(4) arrangements for the *Metering Provider* to obtain physical access to the *metering installation*; and

(5) the terms upon which a *Registered Participant* is to supply any *ancillary services* under the *connection agreement*.

(h) *AEMO* must, within 20 *business days* of receipt of the notice under paragraph (g), advise the relevant *Network Service Provider* and the *Registered Participant* of whether the proposed *metering installation* is

acceptable for those *metering installations* associated with those *connection points* which are classified as *metering installation* types 1, 2, 3 and 4 as specified in schedule 7.2.

5.3.7A Application for connection to declared shared network

(a) In relation to a *declared transmission system,* the powers, functions and responsibilities of the *Network Service Provider* are divided between *AEMO* and the *declared transmission system operator* as follows:

(1) *AEMO* is the *Network Service Provider* in respect of the provision of *shared transmission services*; and

(2) the relevant *declared transmission system operator* is the *Network Service Provider* in respect of the provision of *connection services*.

(b) If:

(1) a *declared transmission system operator* receives a *connection* inquiry or an *application to connect* to a *declared shared network*; and

(2) the inquiry or application relates in whole or part to the provision of *shared transmission services*;

the *declared transmission system operator* must pass on to *AEMO* the information provided by the applicant in connection with the inquiry or application.

5.3.8 Provision and use of information

(a) The data and information provided under this rule 5.3 is *confidential information* and must:

(1) be prepared, given and used in good faith; and

(2) not be disclosed or made available by the recipient to a third party except as set out in clause 3.13.3 or this clause 5.3.8.

(b) The data and information to be provided under this rule 5.3 may be shared between a *Network Service Provider* and *AEMO* for the purpose of enabling:

(1) the *Network Service Provider* to advise *AEMO* of *ancillary services* or similar services described in clause 3.11.3(j); and

(2) either party to:

(i) assess the effect of a proposed *facility* or proposed alteration to *generating plant* (as the case may be) on:

(A) the performance of the *power system*; or

(B) another proposed *facility* or another proposed alteration;

(ii) assess proposed *negotiated access standards*; or

(iii) determine the extent of any required *augmentation* or *extension*.

(c) A *Network Service Provider* may disclose the data and information to be provided under this rule 5.3 to another *Network Service Provider* if the *Network Service Provider* considers the information or data is materially relevant to that provider for *connection*.

(d) A person intending to disclose information under paragraphs (b) or (c) must first advise the relevant *Connection Applicant* of the extent of the disclosure.

(e) If a *Connection Applicant* or *Network Service Provider* becomes aware of any material change to any information contained in or relevant to an *application to connect*, it must promptly notify the other party in writing of that change.

(f) A *Registered Participant* must, within 5 *business days* of becoming aware that any information provided to *AEMO* in relation to a *performance standard* or other information of a kind required to be provided to *AEMO* under clause 5.3.7 is incorrect, advise *AEMO* of the correct information.

5.3.9 Procedure to be followed by a Generator proposing to alter a generating system

(a) This clause 5.3.9 applies where a *Generator* proposes to alter:

(1) a *connected generating system*; or

(2) a *generating system* for which *performance standards* have been previously accepted by *AEMO*,

in a manner that will affect the performance of the *generating system* relative to any of the technical requirements set out in clauses S5.2.5, S5.2.6, S5.2.7 and S5.2.8.

(b) A *Generator* to which this clause applies, must submit to the *Network Service Provider* with a copy to *AEMO*:

(1) a description of the nature of the alteration and the timetable for implementation;

(2) in respect of the proposed alteration to the *generating system*, details of the *generating unit* design data and *generating unit* setting data in

accordance with the *Generating System Model Guidelines, Generating System Design Data Sheet,* or *Generating System Setting Data Sheet*; and

(3) in relation to each relevant technical requirement for which the proposed alteration to the equipment will affect the performance of the *generating system,* the proposed amendments to:

(i) the applicable *automatic access standard*; or

(ii) a proposed *negotiated access standard*.

(c) Clause 5.3.4A applies to a submission by a *Generator* under paragraph (b)(3)(ii).

(d) Without limiting subparagraph (b)(3), for the purposes of that subparagraph (unless *AEMO* and the *Network Service Provider* otherwise agree), a proposed alteration to the equipment specified in column 1 of the table set out below is taken to affect the performance of the *generating system* relative to technical requirements specified in column 2, thereby necessitating a submission under subparagraph (b)(3).

Column 1 **(altered equipment)**	**Column 2** **(clause)**
machine windings	S5.2.5.1, S5.2.5.2, S5.2.8
power converter	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13, S5.2.8
reactive compensation plant	S5.2.5.1, S5.2.5.2, S5.2.5.5, S5.2.5.12, S5.2.5.13
excitation control system	S5.2.5.5, S5.2.5.7, S5.2.5.12, S5.2.5.13
voltage control system	S5.2.5.5, S5.2.5.12, S5.2.5.13
governor *control system*	S5.2.5.7, S5.2.5.11, S5.2.5.14
power *control system*	S5.2.5.11, S5.2.5.14
protection system	S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.7, S5.2.5.8, S5.2.5.9
auxiliary supplies	S5.2.5.1, S5.2.5.2, S5.2.8
remote control and monitoring system	S5.2.5.14, S5.2.6.1, S5.2.6.2

(e) The *Network Service Provider* may as a condition of considering a submission made under paragraph (b), require payment of a fee to meet the reasonable costs anticipated to be incurred by the provider, other *Network Service Providers* and *AEMO*, in the assessment of the submission.

(f) The *Network Service Provider* must require payment of a fee under paragraph (e) if so requested by *AEMO*.

(g) On payment of the required fee referred to in paragraph (e), the *Network Service Provider* must pay such amounts as are on account of the costs anticipated to be incurred by the other *Network Service Providers* and *AEMO*, as appropriate.

(h) If the application of this clause 5.3.9 leads to a variation to an existing *connection agreement* the *Network Service Provider* and the *Generator* must immediately jointly advise *AEMO*.

5.3.10 Acceptance of performance standards for generating plant that is altered

(a) A *Generator* must not commission altered *generating plant* until the *Network Service Provider* has advised the *Generator* that the provider and *AEMO* are satisfied in accordance with paragraph (b).

(b) In relation to altered *generating plant*, the *Network Service Provider* and *AEMO*, to the extent of *AEMO's* advisory role under clause 5.3.4A, must be satisfied that:

(1) the *Generator* has complied with clause 5.3.9; and

(2) each amended *performance standard* submitted by the *Generator* either meets:

(i) the *automatic access standard* applicable to the relevant technical requirement; or

(ii) the *negotiated access standard* under clause 5.3.4A as applied in accordance with clause 5.3.9(c).

(c) For the purposes of paragraph (a), *AEMO* must advise the *Network Service Provider* as to whether it is satisfied with the matters referred to paragraph (b).

5.4 Design of Connected Equipment

5.4.1 Application

This rule 5.4 applies to new installations and modifications to existing installations that include alterations to existing *generating plant*, after:

(a) 13 December 1998, in the case of installations located in *participating jurisdictions* other than Tasmania; and

(b) 29 May 2005, in the case of installations located in Tasmania.

5.4.2 Advice of inconsistencies

(a) At any stage prior to commissioning the *facility* in respect of a *connection* if there is an inconsistency between the proposed equipment and the *connection agreement* including the *performance standards*, the *Registered Participant* or the person intending to be registered as a *Generator* must:

(1) advise the relevant *Network Service Provider* and, if the inconsistency relates to *performance standards*, *AEMO*, in writing of the inconsistency; and

(2) if necessary, negotiate in good faith with the *Network Service Provider* any necessary changes to the *connection agreement*.

(b) If an inconsistency in a *connection agreement* including a *performance standard* is identified under paragraph (a), the *Registered Participant* or the person intending to be registered as a *Generator* and the *Network Service Provider* must not commission the *facility* in respect of a *connection* unless the *facility* or the *connection agreement* or *performance standard* has been varied to remove the inconsistency.

(c) Nothing in this clause 5.4.2 affects the operation of clause 5.3.6(c1).

5.4.3 Additional information

A *Registered Participant* must provide any additional information in relation to its *plant* or associated equipment as the relevant *Network Service Provider* reasonably requests.

5.4.4 Advice on possible non-compliance

(a) If the relevant *Network Service Provider* reasonably believes that the design of a proposed *facility* has potential to adversely and materially affect the performance of the *power system*, the *Network Service Provider* may require the *Registered Participant* to submit to it specified design information and

drawings to enable the *Network Service Provider* to assess the performance of the *facility* in respect of its interaction with the *power system*:

(1) after the *Registered Participant* has entered into an agreement for the supply of *plant* or associated equipment to be connected; and

(2) when the relevant contractor's designs have progressed to a point where preliminary designs are available but prior to manufacture of equipment.

(b) The *Network Service Provider* must, within 40 *business days* of receipt of such information, use its reasonable endeavours to advise the *Registered Participant* in writing of any design deficiencies which the *Network Service Provider* believes would cause the design to be inconsistent with the *connection agreement* or the *Rules*.

(c) Notwithstanding clause 5.4.4(b), it is the *Registered Participant's* sole responsibility to ensure that all *plant* and equipment associated with the *connection* complies with the *connection agreement* and the *Rules*.

5.4A Access arrangements relating to Transmission Networks

(a) The *Transmission Network Service Provider* referred to in this rule 5.4A is the *Transmission Network Service Provider* required under clause 5.3.3 to process and respond to a *connection* enquiry or required under clause 5.3.5 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *transmission network* owned, controlled or operated by that *Transmission Network Service Provider* or for the provision of *network service*.

(b) If requested by a *Connection Applicant*, whether as part of a *connection* enquiry, application to *connect* or the subsequent negotiation of a *connection* agreement, the *Transmission Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *transmission network user access* arrangements sought by the *Connection Applicant*.

(c) As a basis for negotiations under paragraph (b):

(1) the *Connection Applicant* must provide to the *Transmission Network Service Provider* such information as is reasonably requested relating to the expected operation of:

(i) its *generating units* (in the case of a *Generator*);

(ii) its *network elements* used in the provision of *network service* (in the case of a *Network Service Provider*); or

(iii) its *plant* (in the case of any other kind of *Connection Applicant*); and

(2) the *Transmission Network Service Provider* must provide to the *Connection Applicant* such information as is reasonably requested to allow the *Connection Applicant* to fully assess the commercial significance of the *transmission network user access* arrangements sought by the *Connection Applicant* and offered by the *Transmission Network Service Provider*.

(d) A *Connection Applicant* may seek *transmission network user access* arrangements at any level of *power transfer capability* between zero and:

(1) in the case of a *Generator*, the *maximum power input* of the relevant *generating units* or group of *generating units*;

(2) in the case of a *Network Service Provider*, the *power transfer capability* of the relevant *network elements*; and

(3) in the case of any other kind of *Connection Applicant*, the *maximum demand* at the *connection point* for the relevant *plant*.

(e) The *Transmission Network Service Provider* must use reasonable endeavours to provide the *transmission network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:

(1) the *connection assets* to be provided by the *Transmission Network Service Provider* or otherwise at the *connection point*; and

(2) the potential *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* or *distribution networks* to provide that level of *power transfer capability* over the period of the *connection agreement* taking into account the amount of *power transfer capability* provided to other *Registered Participants* under *transmission network user access* or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.

(f) The *Transmission Network Service Provider* and the *Connection Applicant* must negotiate in good faith to reach agreement as appropriate on:

(1) the *connection service* charge to be paid by the *Connection Applicant* in relation to *connection assets* to be provided by the *Transmission Network Service Provider*;

(2) in the case of a *Market Network Service Provider*, the service level standards to which the *Market Network Service Provider* requires the

Transmission Network Service Provider to adhere in providing it services;

(3) the *use of system services* charge to be paid:

(i) by the *Connection Applicant* in relation to any augmentations or extensions required to be undertaken on all affected transmission networks and distribution networks; and

(ii) where the *Connection Applicant* is a *Market Network Service Provider*, to the *Market Network Service Provider* in respect of any reduction in the long run marginal cost of *augmenting* the *transmission network* as a result of it being *connected* to the *transmission network*;

('*negotiated use of system charges*'); and

(4) the amounts ('*access charges*') referred to in paragraphs (g)-(j).

(g) The amount to be paid by the *Connection Applicant* to the *Transmission Network Service Provider* in relation to the costs reasonably incurred by the provider in providing *transmission network user access*.

(h) Where the *Connection Applicant* is a *Generator*:

(1) the compensation to be provided by the *Transmission Network Service Provider* to the *Generator* in the event that the *generating units* or group of *generating units* of the *Generator* are *constrained off* or *constrained on* during a *trading interval*; and

(2) the compensation to be provided by the *Generator* to the *Transmission Network Service Provider* in the event that *dispatch* of the *Generator's generating units* or group of *generating units* causes another *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval*.

(i) Where the *Connection Applicant* is a *Market Network Service Provider:*

(1) the compensation to be provided by the *Transmission Network Service Provider* to the *Market Network Service Provider* in the event that the *transmission network user access* is not provided; and

(2) the compensation to be provided by the *Market Network Service Provider* to the *Transmission Network Service Provider* in the event that *dispatch* of the relevant *market network service* causes a *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval* or causes the *dispatch* of another *market network service* to be *constrained*.

(j) In the case of any other kind of *Connection Applicant*, the compensation to be provided by the *Transmission Network Service Provider* to the *Connection Applicant* in the event that the *transmission network user access* is not provided.

(k) The maximum charge that can be applied by the *Transmission Network Service Provider* in respect of *negotiated use of system charges* for the *transmission network* is a charge that is determined in accordance with Part J of Chapter 6A.

5.5 Access arrangements relating to Distribution Networks

(a) In this rule 5.5:

(1) the *Distribution Network Service Provider* is the *Distribution Network Service Provider* required under clause 5.3.3 to process and respond to a *connection* enquiry or required under clause 5.3.5 to prepare an offer to *connect* for the establishment or modification of a *connection* to the *distribution network* owned, controlled or operated by that *Distribution Network Service Provider* or for the provision of *network service*; and

(2) the references to a *Connection Applicant* are to an *Embedded Generator* or *Market Network Service Provider* who makes a *connection* enquiry under clause 5.3.2 or an application to *connect* under clause 5.3.4 in relation to any *generating units* or group of *generating units*, or any *network elements* used in the provision of *network service*, as the case may be.

(b) If requested by a *Connection Applicant*, whether as part of a *connection* enquiry, application to *connect* or the subsequent negotiation of a *connection agreement*, the *Distribution Network Service Provider* must negotiate in good faith with the *Connection Applicant* to reach agreement in respect of the *distribution network user access* arrangements sought by the *Connection Applicant*.

(c) As a basis for negotiations under paragraph (b):

(1) the *Connection Applicant* must provide to the *Distribution Network Service Provider* such information as is reasonably requested relating to the expected operation of:

(i) its *generating units* (in the case of an *Embedded Generator*); or

(ii) its *network elements* used in the provision of *network service* (in the case of a *Market Network Service Provider*); and

(2) the *Distribution Network Service Provider* must provide to the *Connection Applicant* such information as is reasonably requested to allow the *Connection Applicant* to fully assess the commercial significance of the *distribution network user access* arrangements sought by the *Connection Applicant* and offered by the *Distribution Network Service Provider*.

(d) A *Connection Applicant* may seek *distribution network user access* arrangements at any level of *power transfer capability* between zero and:

(1) in the case of an *Embedded Generator*, the *maximum power input* of the relevant *generating units* or group of *generating unit*s; and

(2) in the case of a *Market Network Service Provider*, the *power transfer capability* of the relevant *network elements*.

(e) The *Distribution Network Service Provider* must use reasonable endeavours to provide the *distribution network user access* arrangements being sought by the *Connection Applicant* subject to those arrangements being consistent with *good electricity industry practice* considering:

(1) the *connection assets* to be provided by the *Distribution Network Service Provider* or otherwise at the *connection point*; and

(2) the potential *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* or *distribution networks* to provide that level of *power transfer capability* over the period of the *connection agreement* taking into account the amount of *power transfer capability* provided to other *Registered Participants* under *transmission network* user access or *distribution network user access* arrangements in respect of all affected *transmission networks* and *distribution networks*.

(f) The *Distribution Network Service Provider* and the *Connection Applicant* must negotiate in good faith to reach agreement as appropriate on:

(1) the *connection service charge* to be paid by the *Connection Applicant* in relation to *connection assets* to be provided by the *Distribution Network Service Provider*;

(2) in the case of a *Market Network Service Provider*, the service level standards to which the *Market Network Service Provider* requires the *Distribution Network Service Provider* to adhere in providing it services;

(3) the *use of system services* charge to be paid:

(i) by the *Connection Applicant* in relation to any *augmentations* or *extensions* required to be undertaken on all affected *transmission networks* and *distribution networks*; and

(ii) where the *Connection Applicant* is a *Market Network Service Provider*, to the *Market Network Service Provider* in respect of any reduction in the long run marginal cost of *augmenting* the *distribution network* as a result of it being *connected* to the *distribution network*,

('*negotiated use of system charges'*); and

(4) the following amounts:

(i) the amount to be paid by the *Connection Applicant* to the *Distribution Network Service Provider* in relation to the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access*;

(ii) where the *Connection Applicant* is an *Embedded Generator*:

(A) the compensation to be provided by the *Distribution Network Service Provider* to the *Embedded Generator* in the event that the *generating units* or group of *generating units* of the *Embedded Generator* are *constrained off* or *constrained on* during a *trading interval*; and

(B) the compensation to be provided by the *Embedded Generator* to the *Distribution Network Service Provider* in the event that dispatch of the *Embedded Generator's generating units* or group of *generating units* causes another *Generator's generating units* or group of *generating units* to be *constrained off* or *constrained on* during a *trading interval*; and

(iii) where the *Connection Applicant* is a *Market Network Service Provider*:

(A) the compensation to be provided by the *Distribution Network Service Provider* to the *Market Network Service Provider* in the event that the *distribution network user access* is not provided; and

(B) the compensation to be provided by the *Market Network Service Provider* to the *Distribution Network Service Provider* in the event that *dispatch* of the relevant *market network service* causes a *Generator's generating units* or group of *generating units* to be *constrained off* or

constrained on during a *trading interval* or causes the *dispatch* of another *market network service* to be *constrained*.

(g) The maximum negotiated *use of system* charges applied by a *Distribution Network Service Provider* must be in accordance with the applicable requirements of Chapter 6 and the *Negotiated Distribution Service Criteria* applicable to the *Distribution Network Service Provider*.

(h) A *Distribution Network Service Provider* must pass through to a *Connection Applicant* the amount calculated in accordance with paragraph (i) for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* to a *Transmission Network Service Provider* had the *Connection Applicant* not been *connected* to its *distribution network (*'avoided charges for the locational component of *prescribed TUOS services*').

(i) To calculate the amount to be passed through to a *Connection Applicant* in accordance with paragraph (h), a *Distribution Network Service Provider* must, if prices for the locational component of *prescribed TUOS services* were in force at the relevant *transmission network connection point* throughout the relevant *financial year*:

(1) determine the charges for the locational component of *prescribed TUOS services* that would have been payable by the *Distribution Network Service Provider* for the relevant *financial year*:

(i) where the *Connection Applicant* is an *Embedded Generator*, if that *Embedded Generator* had not injected any *energy* at its *connection point* during that *financial year*;

(ii) where the *Connection Applicant* is a *Market Network Service Provider*, if the *Market Network Service Provider* had not been *connected* to the *Distribution Network Service Provider's distribution network* during that *financial year*; and

(2) determine the amount by which the charges calculated in subparagraph (1) exceed the amount for the locational component of *prescribed TUOS services* actually payable by the *Distribution Network Service Provider*, which amount will be the relevant amount for the purposes of paragraph (h).

(j) Where prices for the locational component of *prescribed TUOS services* were not in force at the relevant *distribution network connection point* throughout the relevant *financial year*, as referred to in paragraph (i), the *Distribution Network Service Provider* must apply an equivalent procedure to that referred to in paragraph (i) in relation to that component of its *transmission use of system service* charges which is deemed by the relevant

Transmission Network Service Provider to represent the marginal cost of *transmission*, less an allowance for locational signals present in the *spot market*, to determine the relevant amount for the purposes of paragraph (h).

5.6 Planning and Development of Network

5.6.1 Forecasts for connection points to transmission network

(a) The relevant *Network Service Provider* must give at least 40 *business days* written notice to each relevant *Registered Participant* of the annual date by which the *Registered Participant* must provide the relevant *Network Service Provider* with the short and long term electricity *generation, market network service* and *load* forecast information listed in schedule 5.7 in relation to each *connection point* which *connects* the *Registered Participant* to a *transmission network* of that *Network Service Provider* and any other relevant information as reasonably required by the *Network Service Provider*.

(b) Details of planned future *generating units, market network services* and *loads*, being details regarding the proposed commencing date, *active power capability* and *reactive power capability*, *power transfer capability,* operating times/seasons and special operating requirements, must be given by each relevant *Registered Participant* to the relevant *Network Service Provider* on reasonable request.

(c) Each relevant *Registered Participant* must use reasonable endeavours to provide accurate information under clause 5.6.1(a) which must include details of any factors which may impact on *load* forecasts or proposed *facilities* for *generation* or *market network services*.

(d) If the *Network Service Provider* reasonably believes any forecast information to be inaccurate, the *Network Service Provider* may modify that forecast information and must advise the relevant *Registered Participant* and *AEMO* in writing of this action and the reason for the modification. The *Network Service Provider* is not responsible for any adverse consequences of this action or for failing to modify forecast information under this clause 5.6.1(d).

5.6.2 Network Development

(a1) The terms *Network Service Provider, Transmission Network Service Provider* and *Distribution Network Service Provider* when used in this clause 5.6.2 are not intended to refer to, and are not to be read or construed as referring to, any *Network Service Provider* in its capacity as a *Market Network Service Provider*.

(a) Each *Transmission Network Service Provider* and *Distribution Network Service Provider* must analyse the expected future operation of its

transmission networks or *distribution networks* over an appropriate planning period, taking into account the relevant forecast *loads*, any future *generation*, *market network service*, demand side and *transmission* developments and any other relevant data.

(b) Each *Transmission Network Service Provider* must conduct an annual planning review with each *Distribution Network Service Provider connected* to its *transmission network* within each *region*. The annual planning review must:

(1) incorporate the forecast *loads* as submitted or modified in accordance with clause 5.6.1; and

(2) include a review of the adequacy of existing *connection points* and relevant parts of the *transmission system* and planning proposals for future *connection points*; and

(3) take into account the most recent *NTNDP*; and

(4) consider the potential for *augmentations*, or non-*network* alternatives to *augmentations*, that are likely to provide a net economic benefit to all those who produce, consume and transport electricity in the *market*.

(c) Where the need for an *augmentation* or a non-network alternative is identified (either by the annual planning review or independently of that review), the relevant parties must undertake joint planning in order to determine plans for consideration by relevant *Registered Participants, AEMO and interested parties*. For this purpose, the relevant parties are:

(1) for the *declared shared network* of an *adoptive jurisdiction* – the relevant *declared transmission system operator*, the relevant *Distribution Network Service Provider*, *AEMO* and any *interested party* that has informed *AEMO* of its interest in the joint planning process; and

(2) for any other case – the relevant *Network Service Providers*.

(d) The minimum planning period for the purposes of the annual planning review is 5 years for *distribution networks* and 10 years for *transmission* networks.

(e) Each *Network Service Provider* must:

(1) extrapolate the forecasts provided to it by *Registered Participants* for the purpose of planning;

(2) if the analysis required by subparagraph (1) indicates that any relevant technical limits of the *transmission or distribution systems*

will be exceeded, either in normal conditions or following the contingencies specified in schedule 5.1, notify any affected *Registered Participants* and *AEMO* of these limitations; and

(3) notify any affected *Registered Participants* and *AEMO* of the expected time for undertaking proposed corrective action which may consist of:

(i) *dual function assets* or *transmission investment* designed to address limitations in respect of a *distribution network* notified under subparagraph (2); and

(ii) *network* or non *network* corrective action or modifications to *connection facilities,* designed to address the limitations notified under subparagraph (2).

(e1) For corrective action proposals of a kind referred to in paragraph (e)(3)(i), the processes detailed in paragraphs (f), (g1) and (h)-(m) must be conducted jointly by the relevant *Distribution Network Service Provider* and *Transmission Network Service Provider*.

(e2) For corrective action proposals of a kind referred to in paragraph (e)(3)(ii) and notified by a *Distribution Network Service Provider*, the processes detailed in paragraphs (f) and (g), (h)–(m) must be conducted by the relevant *Distribution Network Service Provider*.

(f) Before making the report referred to in paragraph (h), the relevant *Distribution Network Service Provider* or *Network Service Providers* must consult with affected *Registered Participants*, *AEMO* and *interested parties* on the possible options, including but not limited to demand side options, *generation* options and *market network service* options to address the projected limitations of the relevant *distribution system* except that a *Distribution Network Service Provider* does not need to consult on a *network* option which would be a *new small distribution network asset*.

(g) Each *Distribution Network Service Provider* must carry out an economic cost effectiveness analysis of possible options to identify options that satisfy the *regulatory test*, while meeting the technical requirements of schedule 5.1, and where the *Network Service Provider* is required by clause 5.6.2(f) to consult on the option this analysis and allocation must form part of the consultation on that option.

(g1) For corrective action proposals of a kind referred to in paragraph (e)(3)(i), the relevant *Transmission Network Service Provider* and *Distribution Network Service Provider* must carry out an economic cost effectiveness analysis of possible options to identify options that satisfy the *regulatory test*, while meeting the technical requirements of schedule 5.1 and that

analysis and allocation must form part of any consultation required by paragraph (f).

(h) Following conclusion of the process outlined in paragraphs (f) and (g) or (g1), the relevant *Distribution Network Service Provider* or *Network Service Providers* must prepare a report that is to be made available to affected *Registered Participants*, *AEMO* and *interested parties* which:

(1) includes an assessment of all identified options referred to in paragraph (g) or (g1);

(2) includes details of the preferred proposal including:

(i) its economic cost effectiveness analysis in accordance with paragraph (g) or (g1); and

(ii) the consultations conducted for the purposes of paragraph (g) or (g1);

(3) summarises the submissions from the consultations; and

(4) recommends the action to be taken.

(i) *Registered Participants* may dispute the recommendation of the report prepared under clause 5.6.2(h) within 40 *business days* after the report is made available in respect of any proposal that is a *new large distribution network asset* or is reasonably likely to change the *distribution use of system service* charges applicable to that *Registered Participant* by more than 2% at the date of the next price review, based on the assumption that the same approach to *distribution network* pricing is taken for the next review period as that taken for the current review period.

(j) If any *Registered Participant* disputes a recommendation under paragraph (i), the relevant *Distribution Network Service Provider* or *Network Service Providers* and the relevant affected *Registered Participant* must negotiate in good faith to reach agreement on the action to be taken.

(k) Following:

(1) completion of the 40 *business day* period referred to in clause 5.6.2(i) or on resolution of any dispute in accordance with rule 8.2, in relation to proposals to which clause 5.6.2(j) applies; or

(2) completion of the report referred to in clause 5.6.2(h), in relation to any other *network* option recommended by the report,

the relevant *Distribution Network Service Provider* or *Transmission Network Service Provider* must arrange for the *network* options (if any)

recommended by its report made in accordance with clause 5.6.2(h) to be available for service by the agreed time.

(k1) The relevant *Distribution Network Service Provider* or *Transmission Network Service Provider* must, as appropriate, include the cost of the relevant *network* options referred to in paragraph (k) in either:

(1) the calculation of *distribution service* prices determined in accordance with Chapter 6; or

(2) the calculation of *transmission use of system charges.*

(l) If a *use of system service* or the provision of a service at a *connection point* is directly affected by a *transmission network* or *distribution network augmentation,* appropriate amendments to relevant *connection agreements* must be negotiated in good faith between the parties to them.

(m) Where the relevant *Transmission Network Service Provider* or *Distribution Network Service Provider* decides to implement a *generation* option as an alternative to *network augmentation*, the *Network Service Provider* must:

(1) register the *generating unit* with *AEMO* and specify that the *generating unit* may be periodically used to provide a *network* support function and will not be eligible to set *spot prices* when *constrained on* in accordance with clause 3.9.7; and

(2) include the cost of this *network* support service in the calculation of *transmission service* and *distribution service* prices determined in accordance with Chapter 6 or Chapter 6A, as the case may be.

(n) *AEMO* must provide to *Network Service Providers* on request, a copy of any report provided to *AEMO* by a *Network Service Provider* under clause 5.2.3(d)(12). If a *Registered Participant* reasonably considers that it is or may be adversely affected by a development or change in another *region*, the *Registered Participant* may request the preparation of a report by the relevant *Network Service Provider* as to the technical impacts of the development or change. If so requested, the *Network Service Provider* must prepare such a report and provide a copy of it to *AEMO*, the *Registered Participant* requesting the report and, on request, any other *Registered Participant*.

5.6.2A Annual Planning Report

(a) By 30 June each year all *Transmission Network Service Providers* must *publish* an *Annual Planning Report* setting out the results of the annual planning review conducted in accordance with clause 5.6.2(a) and (b).

(b) The *Annual Planning Report* must set out:

(1) the forecast *loads* submitted by a *Distribution Network Service Provider* in accordance with clause 5.6.1 or as modified in accordance with clause 5.6.1(d);

(2) planning proposals for future *connection points*;

(3) a forecast of *constraints* and inability to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction* over 1, 3 and 5 years;

(3a) in respect of information required by subparagraph (3), where an estimated reduction in forecast *load* would defer a forecast *constraint* for a period of 12 months, include:

(i) the year and months in which a *constraint* is forecast to occur;

(ii) the relevant *connection points* at which the estimated reduction in forecast *load* may occur;

(iii) the estimated reduction in forecast *load* in MW needed; and

(iv) a statement of whether the *Transmission Network Service Provider* plans to issue a request for proposals for *augmentation* or a non-network alternative identified by the annual planning review conducted under clause 5.6.2(b) and if so, the expected date the request will be issued;

(4) for all proposed *augmentations* to the *network* the following information, in sufficient detail relative to the size or significance of the project and the proposed operational date of the project:

(i) project/asset name and the month and year in which it is proposed that the asset will become operational;

(ii) the reason for the actual or potential *constraint*, if any, or inability, if any, to meet the *network* performance requirements set out in schedule 5.1 or relevant legislation or regulations of a *participating jurisdiction*, including *load* forecasts and all assumptions used;

(iii) the proposed solution to the *constraint* or inability to meet the *network* performance requirements identified in clause 5.6.2A(b)(4)(ii), if any;

(iv) total cost of the proposed solution;

(v) whether the proposed solution will have a *material inter-network impact*. In assessing whether an *augmentation* to

the *network* will have a *material inter-network impact* a *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by *AEMO* in accordance with clause 5.6.3(b) (if any such criteria have been *published* by *AEMO*); and

(vi) other reasonable *network* and non-*network* options considered to address the actual or potential *constraint* or inability to meet the *network* performance requirements identified in clause 5.6.2A(b)(4)(ii), if any. Other reasonable *network* and non-*network* options include, but are not limited to, *interconnectors*, *generation* options, demand side options, *market network service* options and options involving other *transmission* and *distribution networks*;

(5) the manner in which the proposed *augmentations* relate to the most recent *NTNDP* and the development strategies for current or potential *national transmission flow paths* that are specified in that *NTNDP*.

(6) for all proposed *replacement transmission network assets*:

(i) a brief description of the new *replacement transmission network asset* project, including location;

(ii) the date from which the *Transmission Network Service Provider* proposes that the proposed new *replacement transmission network asset* will become operational;

(iii) the purpose of the proposed new *replacement transmission network asset*;

(iv) a list of any reasonable *network* or non-*network* alternatives to the proposed new *replacement transmission network asset* which are being, or have been, considered by the *Transmission Network Service Provider* (if any). Those alternatives include, but are not limited to, *interconnectors*, *generation* options, demand side options, *market network service* options and options involving other *transmission* or *distribution networks*; and

(v) the *Transmission Network Service Provider's* estimated total capitalised expenditure on the proposed new *replacement transmission network asset*; and

(7) any information required to be included in an *Annual Planning Report* under clause 5.6.5C(c) in relation to a *transmission investment* which is determined to be required to address an urgent and unforeseen *network* issue.

5.6.3 AEMO's obligation to publish information and guidelines and provide advice

(a) In carrying out its *NTP functions*, *AEMO* must:

(1) *publish* an objective set of criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*; and

(2) prepare and *publish augmentation technical reports* on proposed *transmission network augmentations* that are reasonably likely to have a *material inter-network impact*; and

(3) *publish* guidelines to assist *Registered Participants* to determine when an *inter-network test* may be required; and

(4) provide advice to the *AEMC* as requested about the exercise of the *last resort planning power*.

(b) *AEMO* must develop and *publish*, and may vary from time to time, an objective set of criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*. In developing (or varying) the objective set of criteria, *AEMO* must:

(1) proceed in accordance with the *Rules consultation procedures*; and

(2) have regard to:

(i) the relevant guiding objectives and principles provided by the *AEMC*; and

(ii) the advice of *jurisdictional planning representatives*.

(c) The *AEMC* must provide *AEMO* with guiding objectives and principles for the development by *AEMO* of the objective set of criteria for assessing whether or not a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*.

(d) If *AEMO* receives a written request for an *augmentation technical report* on a proposed *transmission network augmentation* that is reasonably likely to have a *material inter-network impact*, or *AEMO* decides in the course of exercising its functions under Chapter 8, Part H, that a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact*, *AEMO* must:

(1) immediately undertake a review of all matters referred to it by the *Transmission Network Service Provider* in order to assess the proposed *augmentation*; and

(2) consult with, and take into account the recommendations of, the *jurisdictional planning representatives* in relation to the proposed *augmentation*; and

(3) make a determination as to:

(i) the performance requirements for the equipment to be *connected*; and

(ii) the extent and cost of *augmentations* and changes to all affected *transmission networks*; and

(iii) the possible material effect of the new *connection* on the *network power transfer capability* including that of other *transmission networks*; and

(4) within 90 *business days* of the date of the request or decision (or some other period agreed between the *Transmission Network Service Provider* and *AEMO*), *AEMO* must *publish* an *augmentation technical report* that sets out:

(i) *AEMO's* determination; and

(ii) the reasons for the determination (including a statement of any information and assumptions on which the determination is based).

A request for an *augmentation technical report* on a proposed *transmission network augmentation* must be accompanied by sufficient information to enable *AEMO* to make a proper assessment of the proposed *augmentation* and *AEMO's* reasonable fees covering the direct costs and expenses of preparing the report.

(e) *AEMO* may, for the purpose of preparing an *augmentation technical report*, by written notice request a *Transmission Network Service Provider* to provide *AEMO* with additional information reasonably available to it and the *Transmission Network Service Provider* must comply with the request.

(f) The period for *AEMO* to *publish* an *augmentation technical report* will be automatically extended by the time taken by the *Transmission Network Service Provider* to provide additional information requested by *AEMO*.

(g) If the objective set of criteria developed and published under paragraph (b) is changed after a project assessment draft report has been made available to *Registered Participants* and *AEMO*, the relevant *Transmission Network Service Provider* is entitled to choose whether the new criteria, or the criteria that existed when the project

assessment draft report was made available to *Registered Participants* and *AEMO*, are to be applied.

5.6.4 Last Resort Planning Power

(a) In this clause 5.6.4:

directed party means one or more *Registered Participants* directed by the *AEMC* in accordance with this clause 5.6.4 and may include:

(1) a single Registered Participant;

(2) two or more *Registered Participants* who are directed by the *AEMC* to jointly and co-operatively comply with a direction under paragraph (c).

direction notice is a notice issued under paragraph (i).

Purpose

(b) The purpose of a *last resort planning power* is to ensure timely and efficient *inter-regional transmission* investment for the long term interests of consumers of electricity.

AEMC last resort planning power

(c) The *AEMC* may, in accordance with this clause 5.6.4, direct one or more *Registered Participants*:

(1) to identify a *potential transmission project* and apply the *regulatory investment test for transmission* to that project; or

(2) to apply the *regulatory investment test for transmission* to a *potential transmission project* identified by the *AEMC*.

(d) The *AEMC* must exercise a *last resort planning power*:

(1) consistently with the purpose referred to in paragraph (b); and

(2) in accordance with the *last resort planning power guidelines.*

Advice from AEMO

(e) The *AEMC* may request advice from *AEMO* in relation to the exercise of the *last resort planning power*, in accordance with the *last resort planning power guidelines*.

(f) **[Deleted]**

Relevant considerations

(g) In deciding whether or not to exercise a *last resort planning power* the *AEMC* must take into account:

(1) advice provided by *AEMO*;

(2) the *NTNDP* for the current and the previous year;

(3) *Annual Planning Reports* published by *Transmission Network Service Providers* under clause 5.6.2A; and

(4) other matters that are relevant in all the circumstances.

(h) In deciding whether or not to exercise the *last resort planning power* the *AEMC* must:

(1) identify a problem relating to *constraints* in respect of *national transmission flow paths* between *regional reference nodes* or a *potential transmission project* (**the problem** or **the project**);

(2) make reasonable inquiries to satisfy itself that there are no current processes underway for the application of the *regulatory investment test for transmission* in relation to the problem or the project;

(3) consider whether there are other options, strategies or solutions to address the problem or the project, and must be satisfied that all such other options are unlikely to address the problem or the project in a timely manner;

(4) be satisfied that the problem or the project may have a significant impact on the efficient operation of the *market*; and

(5) be satisfied that but for the *AEMC* exercising the *last resort planning power*, the problem or the project is unlikely to be addressed.

Direction notice

(i) The *AEMC* must exercise a *last resort planning power* by giving a direction notice in writing to a directed party that states:

(1) the relevant action under paragraph (c) that the directed party is required to undertake; and

(2) the *AEMC's* reasons for exercising the *last resort planning power*.

(j) A direction notice given by the *AEMC* under paragraph (i) may specify one or more of the following:

(1) one or more alternative projects which a directed party must consider when applying the *regulatory investment test for transmission* to *potential transmission projects*;

(2) the time period within which the application of the *regulatory investment test for transmission* must be carried out by a directed party; or

(3) consultation and publication requirements that are in addition to those required by the *regulatory investment test for transmission*.

(k) The *AEMC* must *publish* the direction notice referred to in paragraph (i) on its website.

(l) A directed party must comply with:

(1) a direction notice;

(2) the requirements of the *last resort planning power guidelines*; and

(3) the requirements for the application of the *regulatory investment test for transmission*.

(m) If a directed party (an **earlier directed party**) fails to comply with a direction notice, the *AEMC* may:

(1) in accordance with this clause 5.6.4, give a direction notice to a *Registered Participant* other than the earlier directed party; and

(2) inform the *AER* of the earlier directed party's failure to comply with the direction notice.

Annual reporting for last resort planning power

(n) The *AEMC* must report annually on the matters which the *AEMC* has considered during that year in deciding whether or not to exercise the *last resort planning power*, and may include the information in its Annual Report published under s.27 of the Australian Energy Market Commission Establishment Act 2004 (South Australia).

Last resort planning power guidelines

(o) The *AEMC* must develop and *publish* guidelines ('the *last resort planning power guidelines*') for or with respect to:

(1) the processes to be followed by the *AEMC* in exercising the *last resort planning power*;

(2) **[Deleted]**

(3) the advice to be provided to the *AEMC* by *AEMO*, including the terms of reference for any such advice;

(4) the matters that *AEMO* and the *AEMC* may consider in recommending or nominating a person as an appropriate directed party; and

(5) the provision of information to the *AEMC* in relation to the exercise of the *last resort planning power*.

(p) The *AEMC* must develop and *publish* the *last resort planning power guidelines* in accordance with the *transmission consultation procedures*.

(q) The *AEMC* must develop and *publish* the first *last resort planning power guidelines* by 1 January 2008 and there must be such guidelines available at all times after that date.

(r) The *AEMC* may from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *last resort planning power guidelines*.

5.6.5 [Deleted]

5.6.5A Investments subject to the regulatory test

(a) The *AER* must develop and *publish* the *regulatory test* in accordance with this clause 5.6.5A.

(b) The purpose of the *regulatory test* is to identify *new network investments* or non-*network* alternative options that:

(1) maximise the net economic benefit to all those who produce, consume and transport electricity in the *market*; or

(2) in the event the option is necessitated to meet the service standards linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments*, minimise the present value of the costs of meeting those requirements.

(c) In so far as it relates to paragraph (b)(1), the *regulatory test* must:

(1) be based on a cost-benefit analysis of the future (which includes assessment of reasonable scenarios of future supply and demand conditions):

(i) were the *new network investment* to take place,

compared to the likely alternative option or options,

(ii) were the *new network investment* not to take place;

(2) as a minimum, list or provide for:

(i) the classes of possible benefits that may be included as benefits, and classes of possible benefits that may not be included as benefits;

(ii) the method or methods permitted for estimating the magnitude of the different classes of benefits;

(iii) the classes of possible costs that may be counted as costs, and classes of possible costs that may not be included as costs;

(iv) the method or methods permitted for estimating the magnitude of the different classes of costs; and

(v) the appropriate method and value for specific inputs, where relevant, for determining the discount rate to be applied;

(3) ensure that the identification of the likely alternative option referred to in subparagraph (1) is informed by a consideration of all genuine and practicable alternative options to the proposed *new network investment* without bias regarding:

(i) energy source;

(ii) technology;

(iii) ownership;

(iv) the extent to which the *new network investment* or the non-*network* alternative enables *intra-regional* or *inter-regional* trading of electricity;

(v) whether it is a *network* or non-*network* alternative;

(vi) whether the *new network investment* or non-*network* alternative is intended to be regulated; or

(vii) any other factor;

(4) **[Deleted]**

(5) contain a requirement that where there is more than one likely alternative option to the *new network investment*, and no single alternative option is significantly more likely to occur than the other, then the cost-benefit analysis referred to in subparagraph (1) must be undertaken in relation to each such likely alternative option;

(6) not require the level of analysis to be disproportionate to the scale and size of the *new network investment*;

(7) be capable of predictable, transparent and consistent application; and

(8) provide that alternative options may include (without limitation) *generation*, demand side management, other *network* options, or the substitution of demand for electricity by the provision of alternative forms of energy.

Preparation, publication and amendment of regulatory test and regulatory test application guidelines

(d) At the same time as the *AER publishes* a proposed *regulatory test* under the *distribution consultation procedures*, the *AER* must also *publish* guidelines for the operation and application of the *regulatory test* ('the ***regulatory test* application guidelines**') in accordance with the requirements of this clause 5.6.5A.

(e) The *regulatory test* application guidelines must give effect to and be consistent with this clause 5.6.5A and provide guidance on the operation and application of the *regulatory test*.

(f) The *AER* must develop and *publish* the first *regulatory test* and *regulatory test* application guidelines under this clause 5.6.5A by 31 December 2007 and there must be a *regulatory test* and *regulatory test* application guidelines in force at all times after that date.

(g) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *regulatory test* and *regulatory test* application guidelines developed and *published* under this clause, provided that such amendments must be *published* at the same time.

(h) An amendment as referred to in paragraph (g) does not apply to a current application of the *regulatory test* and the *regulatory test* application guidelines under the *Rules* (however described) by a *Network Service Provider*.

5.6.5B Regulatory investment test for transmission

Principles

(a) The *AER* must develop and *publish* the *regulatory investment test for transmission* in accordance with the *transmission consultation procedure* and this clause 5.6.5B.

(b) The purpose of the *regulatory investment test for transmission* is to identify the *credible option* that maximises the present value of net economic benefit

to all those who produce, consume and transport electricity in the *market* (the *preferred option*). For the avoidance of doubt, a *preferred option* may, in the relevant circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for *reliability corrective action*.

(c) The *regulatory investment test for transmission* must:

(1) be based on a cost-benefit analysis that is to include an assessment of reasonable scenarios of future supply and demand if each *credible option* were implemented compared to the situation where no option isimplemented;

(2) not require a level of analysis that is disproportionate to the scale and likely impact of each of the *credible options* being considered;

(3) be capable of being applied in a predictable, transparent and consistent manner;

(4) require the *Transmission Network Service Provider* to consider the following classes of market benefits that could be delivered by the *credible option*:

(i) changes in fuel consumption arising through different patterns of *generation dispatch*;

(ii) changes in voluntary *load* curtailment;

(iii) changes in involuntary *load shedding*, with the market benefit to be considered using a reasonable forecast of the value of electricity to consumers;

(iv) changes in costs for parties, other than the *Transmission Network Service Provider,* due to:

(A) differences in the timing of new *plant*;

(B) differences in capital costs; and

(C) differences in the operating and maintenance costs;

(v) differences in the timing of *transmission investment*;

(vi) changes in *network* losses;

(vii) changes in *ancillary services* costs;

(viii) competition benefits;

(ix) any additional option value (where this value has not already been included in the other classes of market benefits) gained or foregone from implementing that *credible option* with respect to the likely future investment needs of the *market*; and

(x) other classes of market benefits that are:

(A) determined to be relevant by the *Transmission Network Service Provider* and agreed to by the *AER* in writing before the date the relevant *project specification consultation report* is made available to other parties under clause 5.6.6; or

(B) specified as a class of market benefit in the *regulatory investment test for transmission*;

(5) require a *Transmission Network Service Provider* to include a quantification of all classes of market benefits which are determined to be material in the *Transmission Network Service Provider's* reasonable opinion;

(6) require a *Transmission Network Service Provider* to consider all classes of market benefits as material unless it can, in the *project assessment draft report* or in respect of a proposed *preferred option* which is subject to the exemption contained in clause 5.6.6(y), in the *project specification consultation report*, provide reasons why:

(i) a particular class of market benefit is likely not to affect materially the outcome of the assessment of the *credible options* under the *regulatory investment test for transmission*; or

(ii) the estimated cost of undertaking the analysis to quantify the market benefit is likely to be disproportionate to the scale, size and potential benefits of each *credible option* being considered in the report;

(7) with respect to the classes of market benefits set out in subparagraphs (4)(ii) and (iii), ensure that, if the *credible option* is for *reliability corrective action*, the quantification assessment required by paragraph (5) will only apply insofar as the market benefit delivered by the *credible option* exceeds the minimum standard required *for reliability corrective action*;

(8) require the *Transmission Network Service Provider* to quantify the following classes of costs:

(i) costs incurred in constructing or providing the *credible option*;

(ii) operating and maintenance costs in respect of the *credible option*;

(iii) the cost of complying with laws, regulations and applicable administrative requirements in relation to the construction and operation of the *credible option*; and

(iv) any other class of costs that are:

(A) determined to be relevant by the *Transmission Network Service Provider* and agreed to by the *AER* in writing before the date the relevant *project specification consultation report* is made available to other parties under clause 5.6.6; or

(B) specified as a class of cost in the *regulatory investment test for transmission*;

(9) provide that any cost or market benefit which cannot be measured as a cost or market benefit to *Generators*, *Distribution Network Service Providers, Transmission Network Service Providers* or consumers of electricity may not be included in any analysis under the *regulatory investment test for transmission*;

(10) specify:

(i) the method or methods permitted for estimating the magnitude of the different classes of market benefits;

(ii) the method or methods permitted for estimating the magnitude of the different classes of costs;

(iii) the method or methods permitted for estimating market benefits which may occur outside the *region* in which the *Transmission Network Service Provider's network* is located; and

(iv) the appropriate method and value for specific inputs, where relevant, for determining the discount rate or rates to be applied;

(11) specify that a sensitivity analysis is required of any modelling relating to the cost-benefit analysis; and

(12) reflect that the *credible option* that maximises the present value of net economic benefit to all those who produce, consume or transport electricity in the *market* may, in some circumstances, have a negative net economic benefit (that is, a net economic cost) where the *identified need* is for *reliability corrective action*.

Regulatory investment test for transmission guidelines

(d) At the same time as the *AER* develops and *publishes* a proposed *regulatory investment test for transmission* under the *transmission consultation procedure*, the *AER* must also develop and *publish* guidelines for the operation and application of the *regulatory investment test for transmission* (the *regulatory investment test for transmission application guidelines*) in accordance with the *transmission consultation procedure* and this clause 5.6.5B.

(e) The *regulatory investment test for transmission application guidelines* must:

(1) give effect to and be consistent with this clause 5.6.5B and clauses 5.6.5C, 5.6.5D, 5.6.6, 5.6.6A and 5.6.6AA; and

(2) provide guidance on:

(i) the operation and application of the *regulatory investment test for transmission*;

(ii) the process to be followed in applying the *regulatory investment test for transmission*; and

(iii) how disputes raised in relation to the *regulatory investment test for transmission* and its application will be addressed and resolved.

(f) The *regulatory investment test for transmission application guidelines* must provide guidance and worked examples as to:

(1) what constitutes a *credible option*;

(2) acceptable methodologies for valuing the costs of a *credible option*;

(3) what may constitute an externality under the *regulatory investment test for transmission*;

(4) the classes of market benefits to be considered for the purposes of paragraph (c)(4);

(5) the suitable modelling periods and approaches to scenario development;

(6) the acceptable methodologies for valuing the market benefits of a *credible option* referred to in paragraph (c), including the option value, competition benefits and market benefits that accrue across *regions*;

(7) the appropriate approach to undertaking a sensitivity analysis for the purposes of paragraph (c)(11);

(8) the appropriate approaches to assessing uncertainty and risks; and

(9) when a person is sufficiently committed to a *credible option* for *reliability corrective action* to be characterised as a proponent for the purposes of clause 5.6.5D(b)(7).

(g) The *AER* must develop and *publish* the first *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* by 1 July 2010, and there must be a *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* in force at all times after that date.

(h) The *AER* may, from time to time, amend or replace the *regulatory investment test for transmission* and *regulatory investment test for transmission application guidelines* in accordance with the *transmission consultation procedures*, provided the *AER publishes* any amendments to, or replacements of, the *regulatory investment test for transmission* or *regulatory investment test for transmission application guidelines* at the same time.

(i) An amendment referred to in paragraph (h) does not apply to a current application of the *regulatory investment test for transmission* and the *regulatory investment test for transmission application guidelines* under the *Rules* by a *Transmission Network Service Provider*.

(j) For the purposes of paragraph (i), a "current application" means any action or process initiated under the Rules which relies on or is referenced to the *regulatory investment test for transmission* and/or the *regulatory investment test for transmission application guidelines* and is not completed at the date of the relevant amendment to the *regulatory investment test for transmission* and/or the *regulatory investment test for transmission application guidelines*.

5.6.5C Investments subject to the regulatory investment test for transmission

(a) A *Transmission Network Service Provider* must apply the *regulatory investment test for transmission* to a proposed *transmission investment* except in circumstances where:

(1) the proposed *transmission investment* is required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* as described in paragraph (b);

(2) the estimated capital cost of the most expensive option to address the relevant *identified need* which is technically and economically feasible is less than $5 million (as varied in accordance with a *cost threshold determination*);

(3) the proposed expenditure relates to maintenance or replacement and is not intended to augment the *transmission network* (including *replacement transmission network assets*)*;*

(4) the maintenance, or replacement expenditure also results in an *augmentation* to the *network,* and the estimated capital cost for the *augmentation* component of the proposed expenditure is less than $5 million (as varied in accordance with a *cost threshold determination*), as allocated by the *Transmission Network Service Provider* in accordance with recognised *cost allocation methodologies* and any applicable *AER* guidelines under rule 6A.19;

(5) the proposed *transmission investment* is an investment undertaken by a *Transmission Network Service Provider* which:

(i) re-routes one or more paths of the *network* for the long term; and

(ii) has a substantial primary purpose other than the need to augment the *network*;

(a *reconfiguration investment*) and which the relevant *Transmission Network Service Provider* reasonably estimates to have an estimated capital cost of less than $5 million (as varied in accordance with a *cost threshold determination*) or which has, or is likely to have, no material impact on *network* users;

(6) the proposed *transmission investment* will be a *dual function asset*;

(7) the proposed *transmission investment* is designed to address limitations in respect of a *distribution network* notified under clause 5.6.2(e)(2);

(8) the proposed *transmission investment* will be a *connection asset*; or

(9) the cost of the proposed *transmission investment* is to be fully recovered through charges in relation to *negotiated transmission services*.

(b) For the purposes of paragraph (a)(1), a proposed *transmission investment* will be required to address an urgent and unforeseen *network* issue that would otherwise put at risk the *reliability* of the *transmission network* if:

(1) it is necessary that the proposed *transmission investment* be operational within 6 months of the *Transmission Network Service Provider* identifying the *identified need*;

(2) the event or circumstances causing the *identified need* was not reasonably foreseeable by, and was beyond the reasonable control of, the *Transmission Network Service Provider*;

(3) a failure to address the *identified need* is likely to materially adversely affect the *reliability* and *secure operating state* of the *transmission network*; and

(4) it is not a *contingent project*.

(c) If a proposed *transmission investment* is determined to be required to address an urgent and unforeseen *network* issue as described in paragraph (b), the *Transmission Network Service Provider* must provide the following information in its next *Annual Planning Report* following the identification of the need for the *transmission investment*:

(1) the date when the proposed *transmission investment* became or will become operational;

(2) the purpose of the proposed *transmission investment*; and

(3) the total cost of the proposed *transmission investment*.

(d) With the exception of *funded augmentations,* for each proposed investment to which the *regulatory investment test for transmission* does not apply in accordance with subparagraphs (a)(1)-(9), the *Transmission Network Service Provider* must ensure, acting reasonably, that the investment is planned and developed at least cost over the life of the investment.

(e) A *Transmission Network Service Provider* must not treat different parts of an integrated solution to an *identified need* as distinct and separate options for the purposes of determining whether the *regulatory investment test for transmission* applies to each of those parts.

5.6.5D Identification of a credible option

(a) A *credible option* is an option (or group of options) that:

(1) addresses the *identified need*;

(2) is (or are) commercially and technically feasible; and

(3) can be implemented in sufficient time to meet the *identified need*,

and is (or are) identified as a *credible option* in accordance with paragraph (b).

(b) In applying the *regulatory investment test for transmission*, a *Transmission Network Service Provider* must consider, in relation to a proposed

transmission investment to address an *identified need* other than those described in clauses 5.6.5C(a)(1)-(9), all options that could reasonably be classified as *credible options,* taking into account:

(1) energy source;

(2) technology;

(3) ownership;

(4) the extent to which the *credible option* enables *intra-regional* or *inter-regional* trading of electricity;

(5) whether it is a *network* or non-*network* option;

(6) whether the *credible option* is intended to be regulated;

(7) whether the *credible option* has a proponent; and

(8) any other factor which the *Transmission Network Service Provider* reasonably considers should be taken into account.

(c) The absence of a proponent does not exclude a *transmission investment* option from being considered a *credible option.*

5.6.5E Review of Costs Thresholds

(a) Every 3 years the *AER* must undertake a review (the *cost threshold review*) of the changes in the input costs used to calculate the estimated capital costs in relation to *replacement transmission network assets* and in relation to *transmission investment* as referred to in the definition of *new network investment* and referred to in clauses 5.6.2A(b)(6), 5.6.5C(a)(2), (4) and (5) and 5.6.6(y)(1) for the purposes of determining whether the amounts:

(1) in relation to *replacement transmission network assets*;

(2) of less than $5 million referred to in clause 5.6.5C(a)(2);

(3) of less than $5 million referred to in clause 5.6.5C(a)(4);

(4) of less than $5 million referred to in clause 5.6.5C(a)(5);

(5) of less than $35 million referred to in clause 5.6.6(y)(1); and

(6) in excess of $5 million in relation to *transmission investment* as referred to in the definition of *new network investment*,

(each a *cost threshold*) need to be changed to maintain the appropriateness of the *cost thresholds* over time by adjusting those *cost thresholds* to reflect

any increase or decrease in the input costs since 1 July 2009 in respect of the first *cost threshold review* and since the date of the previous review in respect of every subsequent *cost threshold review*.

(b) Each *cost threshold review* is to be commenced by the *AER* on 31 July of the relevant year, with the first such review to be initiated in 2012.

(c) Within 6 weeks following the commencement of a *cost threshold review*, the *AER* must *publish* a draft determination outlining:

(1) whether the *AER* has formed the view that any of the *cost thresholds* need to be amended to reflect increases or decreases in the input costs to ensure that the appropriateness of the *cost thresholds* is maintained over time;

(2) its reasons for determining whether the *cost thresholds* need to be varied to reflect increases or decreases in the input costs;

(3) if there is to be a variation in a *cost threshold*, the amount of the new *cost threshold* and the date the new *cost threshold* will take effect; and

(4) its reasons for determining the amount of the new *cost threshold*.

(d) At the same time as it *publishes* the draft determination under paragraph (c), the *AER* must *publish* a notice seeking submissions on the draft determination and which specifies the period within which written submissions can be made (the *cost threshold consultation period*) which must be no less than 5 weeks from the date of the notice.

(e) The *AER* must consider any written submissions received during the *cost threshold consultation period* in making its final determination in respect of the matters outlined in paragraph (c).

(f) The final determination must be made and *published* by the *AER* within 5 weeks following the end of the *cost threshold consultation period* (the *cost threshold determination)*.

5.6.6 Regulatory investment test for transmission procedures

(a) In addition to the procedures to make a *connection* to a *network* in rule 5.3, the *Transmission Network Service Provider* must comply with the access arrangements and procedures set out in this clause 5.6.6 and in clause 5.6.6A.

(b) A *Transmission Network Service Provider* who proposes to make a *transmission investment*, other than an investment of the kind described in clauses 5.6.5C(a)(1)-(9), must consult all *Registered Participants, AEMO* and *interested parties* on the proposed *transmission investment* in accordance with this clause 5.6.6.

Project specification consultation report

(c) A *Transmission Network Service Provider* must prepare a report (the *project specification consultation report*), which must include:

(1) a description of the *identified need;*

(2) the assumptions used in identifying the *identified need* (including, in the case of proposed *reliability corrective action*, why the *Transmission Network Service Provider* considers *reliability corrective action* is necessary);

(3) the technical characteristics of the *identified need* that a non-*network* option would be required to deliver, such as:

(i) the size of *load* reduction or additional supply;

(ii) location; and

(iii) operating profile;

(4) if applicable, reference to any discussion on the description of the *identified need* or the *credible options* in respect of that *identified need* in the most recent *National Transmission Network Development Plan*;

(5) a description of all *credible options* of which the *Transmission Network Service Provider* is aware that address the *identified need*, which may include, without limitation, alternative *transmission* options, *interconnectors*, *generation*, demand side management, *market network services* or other *network* options;

(6) for each *credible option* identified in accordance with subparagraph (5), information about:

(i) the technical characteristics of the *credible option*;

(ii) whether the *credible option* is reasonably likely to have a material *inter-regional impact*;

(iii) the classes of market benefits that the *Transmission Network Service Provider* considers are likely not to be material in accordance with clause 5.6.5B(c)(6), together with reasons of why the *Transmission Network Service Provider* considers that these classes of market benefits are not likely to be material;

(iv) the estimated construction timetable and commissioning date; and

(v) to the extent practicable, the total indicative capital and operating and maintenance costs.

(d) The *Transmission Network Service Provider* must make available to all *Registered Participants*, *AEMO* and other *interested parties* the *project specification consultation report*.

(e) The *Transmission Network Service Provider* must:

(1) provide a summary of the *project specification consultation report* to *AEMO* within 5 *business days* of making the *project specification consultation report*; and

(2) upon request by an *interested party*, provide a copy of the *project specification consultation report* to that person within 3 *business days* of the request.

(f) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the *project specification consultation report* on its website.

(g) The *Transmission Network Service Provider* must seek submissions from *Registered Participants, AEMO* and *interested parties* on the *credible options* presented, and the issues addressed, in the *project specification consultation report*.

(h) The period for consultation period referred to in paragraph (g) must be not less than 12 weeks from the date that *AEMO publishes* the summary of the *project specification consultation report* on its website.

(i) A *Transmission Network Service Provider* may discharge its obligation under paragraph (d) to make the *project specification consultation report* available by including the *project specification consultation report* as part of its *Annual Planning Report*.

Project assessment draft report

(j) If the *Transmission Network Service Provider* elects to proceed with the proposed *transmission investment,* within 12 months of the end date of the consultation period referred to in paragraph (h), or such longer time period as is agreed in writing by the *AER*, the *Transmission Network Service Provider* must prepare a report (the *project assessment draft report*), having regard to the submissions received, if any, under paragraph (g) and make that report available to all *Registered Participants*, *AEMO* and *interested parties*.

(k) The *project assessment draft report* must include:

(1) a description of each *credible option* assessed;

(2) a summary of, and commentary on, the submissions to the *project specification consultation report*;

(3) a quantification of the costs, including a breakdown of operating and capital expenditure, and classes of material market benefit for each *credible option*;

(4) a detailed description of the methodologies used in quantifying each class of material market benefit and cost;

(5) reasons why the *Transmission Network Service Provider* has determined that a class or classes of market benefit are not material;

(6) the identification of any class of market benefit estimated to arise outside the *Transmission Network Service Provider's region,* and quantification of the value of such market benefits (in aggregate across all *regions*);

(7) the results of a net present value analysis of each *credible option* and accompanying explanatory statements regarding the results;

(8) the identification of the proposed *preferred option*;

(9) for the proposed *preferred option* identified under subparagraph (8), the *Transmission Network Service Provider* must provide:

(i) details of the technical characteristics;

(ii) the estimated construction timetable and commissioning date;

(iii) if the proposed *preferred option* is likely to have a *material inter-regional network impact*, and if the *Transmission Network Service Provider* has received an *augmentation technical report*, that report; and

(iv) a statement and the accompanying detailed analysis that the *preferred option* satisfies the *regulatory investment test for transmission*.

(l) If a *Transmission Network Service Provider* elects to proceed with a proposed *transmission investment* which is *for reliability corrective action*, it can only do so where the proposed *preferred option* has a proponent. The identity of that proponent must be included in the *project assessment draft report.*

(m) A *Transmission Network Service Provider* may discharge its obligation under paragraph (j) to make the *project assessment draft report* available by including the *project assessment draft report* as part of its *Annual Planning Report* provided its *Annual Planning Report* is *published* within 12 months

of the end date of the consultation period required under paragraph (h) or within 12 months of the end of such longer time period as is agreed by the *AER* in writing under paragraph (j).

(n) The *Transmission Network Service Provider* must:

(1) provide a summary of the *project assessment draft report* to *AEMO* within 5 *business days* of making the *project assessment draft report*; and

(2) upon request by an *interested party*, provide a copy of the *project assessment draft report* to that person within 3 *business days* of the request.

(o) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the *project assessment draft report* on its website.

(p) The *Transmission Network Service Provider* must seek submissions from *Registered Participants, AEMO* and *interested parties* on the *preferred option* presented, and the issues addressed, in the *project assessment draft report*.

(q) The period for consultation referred to in paragraph (p) must be not less than 6 weeks from the date that *AEMO publishes* the summary of the report on its website.

(r) Within 4 weeks after the end of the consultation period required under paragraph (q), at the request of an *interested party*, a *Registered Participant* or *AEMO* (each being a "relevant party" for the purposes of this paragraph), the *Transmission Network Service Provider* must meet with the relevant party if a meeting is requested by two or more relevant parties and may meet with a relevant party if after having considered all submissions, the *Transmission Network Service Provider*, acting reasonably, considers that the meeting is necessary.

Project assessment conclusions report

(s) As soon as practicable after the end of the consultation period on the *project assessment draft report* referred to in paragraph (q), the *Transmission Network Service Provider* must, having regard to the submissions received, if any, under paragraph (p) and the matters discussed at any meetings held, if any, under paragraph (r), prepare and make available to all *Registered Participants*, *AEMO* and *interested parties* and *publish* a report (the *project assessment conclusions report*).

(t) If:

(1) the *Transmission Network Service Provider* is exempt from making a *project assessment draft report* under paragraph (y); and

(2) the *Transmission Network Service Provider* elects to proceed with the proposed *transmission investment*, within 12 months of the end date of the period for consultation referred to in paragraph (h), or within 12 months of the end date of such longer time period as is agreed in writing by the AER,

the *Transmission Network Service Provider* must, having regard to the submissions received, if any, under paragraph (h) as soon as practicable prepare and make available to all *Registered Participants, AEMO* and *interested parties* and *publish* a report *(the project assessment conclusions report)*.

(u) The *project assessment conclusions report* must set out:

(3) the matters detailed in the *project assessment draft report* as required under paragraph (k); and

(4) a summary of, and the *Transmission Network Service Provider's* response to, submissions received, if any, from *interested parties* sought under paragraph (p).

(v) The *Transmission Network Service Provider* must:

(1) provide a summary of the *project assessment conclusions report* to *AEMO* within 5 *business days* of making the *project assessment conclusions report*; and

(2) upon request by an *interested party*, provide a copy of the *project assessment conclusions report* to that person within 3 *business days* of the request.

(w) Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary of the *project assessment conclusions report* on its website.

(x) A *Transmission Network Service Provider* may discharge its obligation under paragraph (s) and (t) to make the *project assessment conclusions report* available by including the *project assessment conclusions report* as part of its *Annual Planning Report* provided that *Annual Planning Report* is *published* within 4 weeks from the date of making available the *project assessment conclusions report* under paragraph (s) or (t), as the case may be.

Exemption from preparing a project assessment draft report for proposed transmission investments without material market benefits

(y) A *Transmission Network Service Provider* is exempt from paragraphs (j) to (r) if:

(1) the estimated capital cost of the proposed *preferred option* is less than $35 million (as varied in accordance with a *cost threshold determination*);

(2) the *Transmission Network Service Provider* has identified in its *project specification consultation report*:

(i) its proposed *preferred option*;

(ii) its reasons for the proposed *preferred option*; and

(iii) that its proposed *transmission investment* has the benefit of this exemption;

(3) the *Transmission Network Service Provider* considers, in accordance with clause 5.6.5B(c)(6), that the proposed *preferred option* and any *other credible option* in respect of the *identified need* will not have a material market benefit for the classes of market benefit specified in clause 5.6.5B(c)(4) except those classes specified in clauses 5.6.5B(c)(4)(ii) and (iii), and has stated this in its *project specification consultation report*; and

(4) the *Transmission Network Service Provider* forms the view that no submissions were received on the *project specification consultation report* which identified additional *credible options* that could deliver a material market benefit.

(z) The *Transmission Network Service Provider* must address in the *project assessment conclusions report* any issues that were raised in relation to a proposed *preferred option* to which paragraph (y) applies during the consultation on the *project specification consultation report.*

5.6.6A Disputes in relation to application of regulatory investment test for transmission

(a) *Registered Participants,* the *AEMC, Connection Applicants, Intending Participants, AEMO* and *interested parties* may, by notice to the *AER*, dispute conclusions made by the *Transmission Network Service Provider* in the *project assessment conclusions report* in relation to:

(1) the application of the *regulatory investment test for transmission*;

(2) the basis on which the *Transmission Network Service Provider* has classified the *preferred option* as being for *reliability corrective action*; or

(3) the *Transmission Network Service Provider's* assessment regarding whether the *preferred option* will have a *material inter-network*

impact, in accordance with any criteria for a *material inter-network impact* that are in force at the time of the preparation of the *project assessment conclusions report*.

(b) A dispute under this clause 5.6.6A may not be raised in relation to any matters set out in the *project assessment conclusions report* which:

(1) are treated as externalities by the *regulatory investment test for transmission*; or

(2) relate to an individual's personal detriment or property rights.

(c) Within 30 days of the date of *publication* of the *project assessment conclusions report* under clause 5.6.6(s) or (t) (as the case may be), the party disputing a conclusion made in the *project assessment conclusions report* (a *disputing party*) must:

(1) give notice of the dispute in writing setting out the grounds for the dispute (the *dispute notice*) to the *AER*; and

(2) at the same time, give a copy of the *dispute notice* to the relevant *Transmission Network Service Provider*.

(d) Subject to paragraph (e)(3), within 40 days of receipt of the *dispute notice* or within an additional period of up to 60 days where the *AER* notifies *interested parties* that the additional time is required to make a determination because of the complexity or difficulty of the issues involved, the *AER* must either:

(1) reject any dispute by written notice to the person who initiated the dispute if the *AER* considers that the grounds for the dispute are misconceived or lacking in substance; and

(2) notify the *Transmission Network Service Provider* that the dispute has been rejected; or

(3) subject to paragraph (f), make and *publish* a determination:

(i) directing the *Transmission Network Service Provider* to amend the matters set out in the *project assessment conclusions report*; or

(ii) stating that, based on the grounds of the dispute, the *Transmission Network Service Provider* will not be required to amend the *project assessment conclusions report.*

(d1) A *Transmission Network Service Provider* must comply with an *AER* determination made under paragraph (d)(3)(i) within a timeframe specified by the *AER* in its determination.

(e) In making a determination under paragraph (d)(3), the *AER*:

(1) must only take into account information and analysis that the *Transmission Network Service Provider* could reasonably be expected to have considered or undertaken at the time that it performed the *regulatory investment test for transmission*;

(2) must *publish* its reasons for making a determination;

(3) may request further information regarding the dispute from the *disputing party* or the *Transmission Network Service Provider* in which case the period of time for rejecting a dispute or issuing a determination under paragraph (d) is extended by the time it takes the relevant party to provide the requested further information to the *AER*;

(4) may disregard any matter raised by the *disputing party* or the *Transmission Network Service Provider* that is misconceived or lacking in substance; and

(5) where making a determination under subparagraph (d)(3)(i), must specify a reasonable timeframe for the *Transmission Network Service Provider* to comply with the *AER's* direction to amend the matters set out in the *project assessment conclusions report*.

(f) The *AER* may only make a determination under subparagraph (d)(3)(i) if it determines that:

(1) the *Transmission Network Service Provider* has not correctly applied the *regulatory investment test for transmission* in accordance with the *Rules*;

(2) the *Transmission Network Service Provider* has erroneously classified the *preferred option* as being for *reliability corrective action*;

(3) the *Transmission Network Service Provider* has not correctly assessed whether the *preferred option* will have a *material inter-network impact*; or

(4) there was a manifest error in the calculations performed by the *Transmission Network Service Provider* in applying the *regulatory investment test for transmission*.

(g) A *disputing party* or the *Transmission Network Service Provider* (as the case may be) must as soon as reasonably practicable provide any information requested under paragraph (e)(3) to the *AER*.

(h) The relevant period of time in which the *AER* must make a determination under paragraph (d)(3) is automatically extended by the period of time taken by the *Transmission Network Service Provider* or a *disputing party* to

provide any additional information requested by the *AER* under this clause 5.6.6A, provided:

(1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and

(2) the *Transmission Network Service Provider* or the *disputing party* provides the additional information within 14 *business days* of receipt of the request.

5.6.6AA Determination that proposed transmission investment satisfies the regulatory investment test for transmission

(a) After the expiry of the 30 day period referred to in clause 5.6.6A(c) and where a *preferred option* is not for *reliability corrective action*, the *Transmission Network Service Provider* may request, in writing to the *AER,* that the *AER* make a determination as to whether the *preferred option* satisfies the *regulatory investment test for transmission.*

(b) The *AER*:

(1) must, within 120 *business days* of receipt of the request from the applicant, subject to paragraph (c), make and *publish* a determination, including reasons for its determination;

(2) must use the findings and recommendations in the *project assessment conclusions report* in making its determination under subparagraph (1);

(3) may request further information from the *Transmission Network Service Provider*; and

(4) may have regard to any other matter the *AER* considers relevant.

(c) The relevant period of time in which the *AER* must make a determination under paragraph (b) is automatically extended by the period of time taken by the *Transmission Network Service Provider* to provide any additional information requested by the *AER* under this clause 5.6.6AA, provided:

(1) the *AER* makes the request for the additional information at least 7 *business days* prior to the expiry of the relevant period; and

(2) the *Transmission Network Service Provider* provides the additional information within 14 *business days* of receipt of the request.

Costs determinations

(d) Where the *AER* engages a consultant to assist in making a determination under clauses 5.6.6A and 5.6.6AA, the *AER* may make a costs determination.

(e) Where a costs determination is made, the *AER* may:

(1) render the *Transmission Network Service Provider* an invoice for the costs; or

(2) determine that the costs should:

(i) be shared by all the parties to the dispute, whether in the same proportion or differing proportions; or

(ii) be borne by a party or parties to the dispute other than the *Transmission Network Service Provider* whether in the same proportion or differing proportions; and

(iii) the *AER* may render invoices accordingly.

(f) If an invoice is rendered, the *AER* must specify a time period for the payment of the invoice that is no later than 30 *business days* from the date the *AER* makes a determination under paragraph (d).

5.6.6B Construction of Funded Augmentations

(a) The term *Transmission Network Service Provider* when used in this clause 5.6.6B is not intended to refer to, and is not to be read or construed as referring to, any *Transmission Network Service Provider* in its capacity as a *Market Network Service Provider*.

(b) A *Transmission Network Service Provider* who proposes to construct a *funded augmentation* must make available to all *Registered Participants* and *AEMO* a notice which must set out:

(1) a detailed description of the proposed *funded augmentation*;

(2) all relevant technical details concerning the proposed *funded augmentation*, the impact of the *funded augmentation* on the relevant *transmission network's Transmission Network Users* and the construction timetable and commissioning date for the *funded augmentation*;

(3) an *augmentation technical report* prepared by *AEMO* if, and only if, the *funded augmentation* is reasonably likely to have a *material inter-network impact* and the *Transmission Network Service Provider* has not received consent to proceed with construction from all *Transmission Network Service Providers* whose *transmission networks* are materially affected by the *funded augmentation*. In

assessing whether a *funded augmentation* is reasonably likely to have a *material inter-network impact*, the *Transmission Network Service Provider* must have regard to the objective set of criteria *published* by *AEMO* (if any such criteria have been *published* by *AEMO*).

(c) The *Transmission Network Service Provider* must provide a summary of the notice prepared in accordance with clause 5.6.6B(b) to *AEMO*. Within 3 *business days* of receipt of the summary, *AEMO* must *publish* the summary on its website.

(d) The *Transmission Network Service Provider* must consult with any *interested parties*, in accordance with the *Rules consultation procedures*, on any matter set out in the notice prepared in accordance with clause 5.6.6B(b).

5.6.6C [Deleted]

5.6A National Transmission Planning

5.6A.1 Preliminary consultation

(a) By no later than 30 January each year, *AEMO* must *publish*:

(1) a document that sets out the *NTNDP inputs* that it proposes to use for the preparation or revision of the *NTNDP* for the following calendar year; and

(2) a document (the **statement of material issues**):

(i) summarising the issues *AEMO* considers to be the material issues involved in the preparation or revision of the *NTNDP* for the following calendar year; and

(ii) giving an indication of *AEMO's* preliminary views on how those issues should be resolved.

(b) At the same time as it *publishes* the documents referred to in paragraph (a), *AEMO* must *publish* an invitation for written submissions to be made to *AEMO* within a period (at least 30 *business days*) specified in the invitation on:

(1) the proposed *NTNDP inputs*; and

(2) the content of the *NTNDP* as it applies for the current year, including the location of the current and potential *national transmission flow paths* identified in the *NTNDP*; and

(3) the issues raised in the *statement of material issues*.

(c) A person may make a written submission to *AEMO* on the proposed *NTNDP inputs*, the content of the *NTNDP* as it applies for the current year, or an issue raised in the *statement of material issues* within the period specified in the invitation.

5.6A.2 Publication of NTNDP

(a) By no later than 31 December each year, *AEMO* must *publish* the *NTNDP* for the following year.

(b) In preparing the *NTNDP* that is to be *published* under paragraph (a), *AEMO* must:

(1) take into account the submissions made in response to the invitation referred to in clause 5.6A.1(b); and

(2) consider the following matters:

(i) the quantity of electricity that flowed, the periods in which the electricity flowed, and *constraints* on the *national transmission flow paths* over the previous year;

(ii) the forecast quantity of electricity that is expected to flow, the periods in which the electricity is expected to flow, and the magnitude and significance of future *network losses* and *constraints*, on the current and potential *national transmission flow paths* over the year in which the *NTNDP* is to apply or some other period to which a scenario that is used for the purposes of the *NTNDP* applies;

(iii) the projected capabilities of the *national transmission grid*, and the *network control ancillary services* required to support the existing and future capabilities of the *national transmission grid*, under each of the scenarios that is being used for the purposes of the *NTNDP*;

(iv) relevant intra-jurisdictional developments and any incremental works that may be needed to co-ordinate *national transmission flow path* planning with intra-jurisdictional planning;

(v) such other matters as *AEMO*, in consultation with the *participating jurisdictions*, considers appropriate; and

(3) have regard to the following documents:

(i) the most recent *Annual Planning Reports* that have been *published*;

(ii) the most recent *statement of opportunities* that has been *published*;

(iii) the most recent gas statement of opportunities published under the National Gas Law;

(iv) the current revenue determination for each *Transmission Network Service Provider*;

(v) any other documents that *AEMO* considers relevant.

(c) An *NTNDP* that is published under paragraph (a) must:

(1) consider and assess an appropriate course for the efficient development of the *national transmission grid* for a planning horizon of at least 20 years from the beginning of the year in which the *NTNDP* applies; and

(2) take into account all *transmission elements* which are part of, or materially affect, the transmission capability of any current or potential *national transmission flow paths*; and

(3) identify a range of credible scenarios for the geographic pattern of the demand for, and supply of, electricity for the planning horizon of the *NTNDP*; and

(4) identify the location of current *national transmission flow paths* and specify their transmission capability; and

(5) identify the location of the potential *national transmission flow paths* over the planning horizon of the *NTNDP* under each of the scenarios referred to in subparagraph (3); and

(6) specify a development strategy for each current and potential *national transmission flow path* in accordance with clause 5.6A.3; and

(7) include a summary of the information specified in rule 3.7A in relation to congestion on each current *national transmission flow path*; and

(8) include a consolidated summary of the *augmentations* proposed by each *Transmission Network Service Provider* in the most recent *Annual Planning Reports* they have *published* and an analysis of the manner in which the proposed *augmentations* relate to the *NTNDP* and any previous *NTNDP*; and

(9) summarise the material issues arising from the submissions received in response to the invitation referred to in clause 5.6A.1(b), explain

how those issues have been addressed in the *NTNDP* and give reasons for not addressing any of those issues in the *NTNDP*.

(d) *AEMO* must *publish* the first *NTNDP* (the *NTNDP* for 2011) no later than 31 December 2010.

(e) If, after the *publication* of the most recent *NTNDP*, *AEMO* becomes aware of information that shows the *NTNDP* to be incorrect in a material respect, *AEMO* must *publish* a correction of the *NTNDP* as soon as practicable.

5.6A.3 Development strategies for national transmission flow paths

A development strategy for a current or potential *national transmission flow path* that is specified in accordance with clause 5.6A.2(c)(6) must:

(1) be proposed for each of the scenarios referred to in clause 5.6A.2(c)(3); and

(2) to the extent reasonably practicable and appropriate, be consistent with:

(i) the co-optimisation of *network* and non-*network* investment; and

(ii) the maximisation of net economic benefit to all those who produce, consume and transport electricity to the *market*; and

(iii) the service standards that are linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments*; and

(3) take into account the following matters:

(i) the current or likely capacity of the *national transmission flow path*, and the need to increase that capacity to relieve current or likely *constraints* and congestion points; and

(ii) technically feasible *network* and non-*network* options (including additional *generation* and demand side options) for relieving current or likely *constraints* or congestion points; and

(iii) possible market benefits associated with each of the options identified under subparagraph (ii); and

(4) include a high level assessment as to:

(i) which of the options, or combination of options, identified under paragraph(3)(ii) provides the most efficient strategy for the development of the *national transmission grid* under each of the scenarios referred to in clause 5.6A.2(c)(3); and

(ii) the manner in which each such option, or combination of options, relates to the overall development of the *power system*.

5.6A.4 NTNDP database

(a) *AEMO* must establish, maintain and make available to the public a database (the *NTNDP database*) that includes *NTNDP inputs* used by it in preparing the most recent *NTNDP*.

(b) The *NTNDP inputs* for an *NTNDP* include:

(1) assumptions made about the cost of fuel used for the generation of electricity (including gas and coal); and

(2) the conversion factors used to relate the consumption of a given quantity of fuel to the production of electricity using that quantity of fuel; and

(3) assumptions about the capital costs associated with the generation of electricity; and

(4) prevailing location of generation capacity; and

(5) assumptions about the price of carbon; and

(6) electricity demand forecasts.

(c) *AEMO* may establish a part of the database for the inclusion of *confidential information*.

(d) A part of the database established for *confidential information* is not to be accessible to the public.

Note

The disclosure of *protected information* to the public may however be authorised under the *National Electricity Law.*

5.6A.5 Jurisdictional planning bodies and jurisdictional planning representatives

(a) A *jurisdictional planning body* must provide assistance *AEMO* reasonably requests in connection with the performance of its *NTP functions*.

(b) If there is no *jurisdictional planning body* or no *jurisdictional planning representative* for a *participating jurisdiction*, *AEMO* may assume the functions of such a body or representative under the *Rules*.

5.7 Inspection and Testing

5.7.1 Right of entry and inspection

(a) If a *Registered Participant* who is party to a *connection agreement* reasonably believes that the other party to the *connection agreement* (being a party who is also a *Registered Participant*) is not complying with a technical provision of the *Rules* and that, as a consequence, the first *Registered Participant* is suffering, or is likely to suffer, a material adverse effect, then the first *Registered Participant* may enter the relevant *facility* at the *connection point* of the other *Registered Participant* in order to assess compliance by the other *Registered Participant* with its technical obligations under the *Rules*.

(b) A *Registered Participant* who wishes to inspect the *facilities* of another *Registered Participant* under clause 5.7.1(a) must give that other *Registered Participant* at least 2 *business days* notice of its intention to carry out an inspection.

(c) A notice given under clause 5.7.1(b) must include the following information:

(1) the name of the *representative* who will be conducting the inspection on behalf of the *Registered Participant*;

(2) the time when the inspection will commence and the expected time when the inspection will conclude; and

(3) the nature of the suspected non-compliance with the *Rules*.

(d) Neither a *Registered Participant* nor *AEMO* may carry out an inspection under this rule 5.7 within 6 *months* of any previous inspection except for the purpose of verifying the performance of corrective action claimed to have been carried out in respect of a non-conformance observed and documented on the previous inspection or (in the case of *AEMO*) for the purpose of reviewing an operating incident in accordance with clause 4.8.15.

(e) At any time when the *representative* of a *Registered Participant* is in another *Registered Participant's facility*, that *representative* must:

(1) cause no damage to the *facility;*

(2) only interfere with the operation of the *facility* to the extent reasonably necessary and approved by the relevant *Registered Participant* (such approval not to be unreasonably withheld or delayed); and

(3) observe "permit to test" access to sites and clearance protocols of the operator of the *facility*, provided that these are not used by the

operator of the *facility* solely to delay the granting of access to site and inspection.

(f) Any *representative* of a *Registered Participant* conducting an inspection under this clause 5.7.1 must be appropriately qualified to perform the relevant inspection.

(g) The costs of inspections under this clause 5.7.1 must be borne by the *Registered Participant* requesting the inspection.

(h) *AEMO* or any of its *representatives* may, in accordance with this rule 5.7, inspect a *facility* of a *Registered Participant* and the operation and maintenance of that *facility* in order to:

(1) assess compliance by the relevant *Registered Participant* with its operational obligations under Chapter 3 or 4, or an *ancillary services agreement*;

(2) investigate any possible past or potential threat to *power system security*; or

(3) conduct any periodic familiarisation or training associated with the operational requirements of the *facility*.

(i) Any inspection under clause 5.7.1(a) or (h) must only be for so long as is reasonably necessary.

(j) Any equipment or goods installed or left on land or in premises of a *Registered Participant* after an inspection conducted under clause 5.7.1 do not become the property of the relevant *Registered Participant* (notwithstanding that they may be annexed or affixed to the relevant land or premises).

(k) In respect of any equipment or goods left on land or premises of a *Registered Participant* during or after an inspection, a *Registered Participant*:

(1) must not use any such equipment or goods for a purpose other than as contemplated in the *Rules* without the prior written approval of the owner of the equipment or goods;

(2) must allow the owner of any such equipment or goods to remove any such equipment or goods in whole or in part at a time agreed with the relevant *Registered Participant*, such agreement not to be unreasonably withheld or delayed; and

(3) must not create or cause to be created any mortgage, charge or lien over any such equipment or goods.

(l) A *Registered Participant* (in the case of an inspection carried out under clause 5.7.1(a)) or *AEMO* (in the case of an inspection carried out under clause 5.7.1(h)) must provide the results of that inspection to the *Registered Participant* whose *facilities* have been inspected, any other *Registered Participant* which is likely to be materially affected by the results of the test or inspection and *AEMO* (in the case of an inspection carried out under clause 5.7.1(a)).

5.7.2 Right of testing

(a) A *Registered Participant,* who has reasonable grounds to believe that equipment owned or operated by a *Registered Participant* with whom it has a *connection agreement* (which equipment is associated with the *connection agreement)* may not comply with the *Rules* or the *connection agreement,* may request testing of the relevant equipment by giving notice in writing to the other *Registered Participant*.

(b) If a notice is given under clause 5.7.2(a) the relevant test is to be conducted at a time agreed by *AEMO*.

(c) The *Registered Participant* who receives a notice under clause 5.7.2(a) must co-operate in relation to conducting tests requested under clause 5.7.2(a).

(d) The cost of tests requested under clause 5.7.2(a) must be borne by the *Registered Participant* requesting the test, unless the equipment is determined by the tests not to comply with the relevant *connection agreement* and the *Rules*, in which case all reasonable costs of such tests must be borne by the owner of that equipment.

(e) Tests conducted in respect of a *connection point* under clause 5.7.2 must be conducted using test procedures agreed between the relevant *Registered Participants*, which agreement is not to be unreasonably withheld or delayed.

(f) Tests under clause 5.7.2 must be conducted only by persons with the relevant skills and experience.

(g) A *Transmission Network Service Provider* must give *AEMO* adequate prior notice of intention to conduct a test in respect of a *connection point* to that *Network Service Provider's network*.

(h) The *Registered Participant* who requests a test under this clause 5.7.2 may appoint a *representative* to witness a test and the relevant *Registered Participant* must permit a *representative* appointed under this clause 5.7.2(h) to be present while the test is being conducted.

(i) A *Registered Participant* who conducts a test must submit a report to the *Registered Participant* who requested the relevant test, *AEMO* and to any

other *Registered Participant* which is likely to be materially affected by the results of the test, within a reasonable period after the completion of the test and the report is to outline relevant details of the tests conducted, including but not limited to the results of those tests.

(j) A *Network Service Provider* may attach test equipment or *monitoring equipment* to *plant* owned by a *Registered Participant* or require a *Registered Participant* to attach such test equipment or *monitoring equipment,* subject to the provisions of clause 5.7.1 regarding entry and inspection.

(k) In carrying out monitoring under clause 5.7.2(j) the *Network Service Provider* must not cause the performance of the monitored *plant* to be *constrained* in any way.

5.7.3 Tests to demonstrate compliance with connection requirements for generators

(a) Each *Generator* must, in accordance with the time frames specified in rule 4.15, provide evidence to any relevant *Network Service Provider* with which that *Generator* has a *connection agreement* and to *AEMO*, that its *generating system* complies with:

(1) the applicable technical requirements of clause S5.2.5; and

(2) the relevant *connection agreement* including the *performance standards*.

(b) **[Deleted]**

(c) If a test required by clause 5.7.3(a) demonstrates that a *generating system* is not complying with one or more technical requirements of clause S5.2.5 or the relevant *connection agreement* or one or more of the *performance standards* then the *Generator* must:

(1) promptly notify the relevant *Network Service Provider* and *AEMO* of that fact; and

(2) promptly notify the *Network Service Provider* and *AEMO* of the remedial steps it proposes to take and the timetable for such remedial work; and

(3) diligently undertake such remedial work and report at monthly intervals to the *Network Service Provider* on progress in implementing the remedial action; and

(4) conduct further tests or monitoring on completion of the remedial work to confirm compliance with the relevant technical requirements or *performance standards* (as the case may be).

(d) If *AEMO* reasonably believes that a *generating system* is not complying with one or more applicable *performance standards* or one or more applicable technical requirements of clause S5.2.5 or the relevant *connection agreement, AEMO* may instruct the *Generator* to conduct tests within 25 *business days* to demonstrate that the relevant *generating system* complies with those *performance standards* or technical requirements.

(e) If the tests undertaken in accordance with paragraph (d) provide evidence that the *generating system* continues to comply with those requirements *AEMO* must reimburse the *Generator* for the reasonable expenses incurred as a direct result of conducting the tests.

(f) If *AEMO*:

(1) is satisfied that:

(i) a *generating system* is not complying with the relevant *performance standards* for that system in respect of one or more of the technical requirements contained in S5.2.5, S5.2.6, S5.2.7 or S5.2.8 and the relevant *connection agreement*; or

(ii) a *generating system's* performance is not adequately represented by the applicable analytical model provided under clause 5.7.6(h) or clause S5.2.4; and

(2) holds the reasonable opinion that the performance of the *generating system*, or inadequacy of the applicable analytical model of the *generating system* is or will impede *AEMO's* ability to carry out its role in relation to *power system security*,

AEMO may direct the relevant *Generator* to operate the *generating system* at a particular *generated* output or in a particular mode until the relevant *Generator* submits evidence reasonably satisfactory to *AEMO* that the *generating system* is complying with the relevant *performance standard* and performing substantially in accordance with the applicable analytical model.

(g) Each *Generator* must maintain records for 7 years for each of its *generating systems* and *power stations* setting out details of the results of all technical performance and monitoring conducted under this clause 5.7.3 and make these records available to *AEMO* on request.

5.7.4 Routine testing of protection equipment

(a) A *Registered Participant* must co-operate with any relevant *Network Service Provider* to test the operation of equipment forming part of a *protection system* relating to a *connection point* at which that *Registered Participant* is *connected* to a *network* and the *Registered Participant* must conduct these tests:

(1) prior to the *plant* at the relevant *connection point* being placed in service; and

(2) at intervals specified in the *connection agreement* or in accordance with an asset management plan agreed between the *Network Service Provider* and the *Registered Participant*.

(a1) A *Network Service Provider* must institute and maintain a compliance program to ensure that its *facilities* of the following types, to the extent that the proper operation of a *facility* listed in this clause may affect *power system security,* operate reliably and in accordance with their performance requirements under schedule 5.1:

(1) *protection systems*;

(2) *control systems* for maintaining or enhancing *power system* stability;

(3) *control systems* for controlling *voltage* or *reactive power*; and

(4) *control systems* for *load shedding.*

(a2) A compliance program under clause 5.7.4(a1) must:

(1) include monitoring of the performance of the *facilities*;

(2) to the extent reasonably necessary, include provision for periodic testing of the performance of those *facilities* upon which *power system security* depends;

(3) provide reasonable assurance of ongoing compliance of the *facilities* with the relevant performance requirements of schedule 5.1; and

(4) be in accordance with *good electricity industry practice*.

(a3) A *Network Service Provider* must immediately notify *AEMO* if it reasonably believes that a *facility* of a type listed in clause 5.7.4(a1) does not comply with, or is likely not to comply with, its performance requirements.

(a4) A notice issued under clause 5.7.4(a3) must:

(1) identify the *facility* and the requirement with which the *facility* does not comply;

(2) give an explanation of the reason why the *facility* failed to comply with its performance requirement;

(3) give the date and time when the *facility* failed to comply with its performance requirement;

(4) give the date and time when the *facility* is expected to again comply with its performance requirement; and

(5) describe the expected impact of the failure on the performance of the *Network Service Provider's transmission system* or *distribution system.*

(b) Each *Registered Participant* must bear its own costs of conducting tests under this clause 5.7.4.

5.7.5 Testing by Registered Participants of their own plant requiring changes to normal operation

(a) A *Registered Participant* proposing to conduct a test on equipment related to a *connection point,* which requires a change to the normal operation of that equipment, must give notice in writing to the relevant *Network Service Provider* of at least 15 *business days* except in an emergency.

(b) The notice to be provided under clause 5.7.5(a) must include:

(1) the nature of the proposed test;

(2) the estimated start and finish time for the proposed test;

(3) the identity of the equipment to be tested;

(4) the *power system* conditions required for the conduct of the proposed test;

(5) details of any potential adverse consequences of the proposed test on the equipment to be tested;

(6) details of any potential adverse consequences of the proposed test on the *power system*; and

(7) the name of the person responsible for the co-ordination of the proposed test on behalf of the *Registered Participant*.

(c) The *Network Service Provider* must review the proposed test described in a notice provided under clause 5.7.5(a) to determine whether the test:

(1) could adversely affect the normal operation of the *power system*;

(2) could cause a threat to *power system security*;

(3) requires the *power system* to be operated in a particular way which differs from the way in which the *power system* is normally operated; or

(4) could affect the normal *metering* of *energy* at a *connection point*.

(d) If the *Network Service Provider* determines that the proposed test does fulfil one of the conditions specified in clause 5.7.5(c), then the *Registered Participant* and *Network Service Provider* must seek *AEMO's* approval prior to undertaking the test, which approval must not be unreasonably withheld or delayed.

(e) If, in *AEMO's* reasonable opinion, a test could threaten public safety, damage or threaten to damage equipment or adversely affect the operation of the *power system*, *AEMO* may direct that the proposed test procedure be modified or that the test not be conducted at the time proposed.

(f) *AEMO* must advise *Network Service Providers* of any test which may have a possible effect on normal *metering* of *energy* at a *connection point.*

(g) *AEMO* must advise any other *Registered Participants* who might be adversely affected by a proposed test and consider any reasonable requirements of those *Registered Participants* when approving the proposed test.

(h) The *Registered Participant* who conducts a test under this clause 5.7.5 must ensure that the person responsible for the co-ordination of a test promptly advises *AEMO* when the test is complete.

(i) If *AEMO* approves a proposed test, *AEMO* must use its reasonable endeavours to ensure that *power system* conditions reasonably required for that test are provided as close as is reasonably practicable to the proposed start time of the test and continue for the proposed duration of the test.

(j) Within a reasonable period after any such test has been conducted, the *Registered Participant* who has conducted a test under this clause 5.7.5 must provide the *Network Service Provider* with a report in relation to that test including test results where appropriate.

5.7.6 Tests of generating units requiring changes to normal operation

(a) A *Network Service Provider* may, at intervals of not less than 12 months per *generating system*, require the testing by a *Generator* of any *generating unit connected* to the *network* of that provider in order to determine analytic

parameters for modelling purposes or to assess the performance of the relevant *generating unit* or *generating system* for the purposes of a *connection agreement*, and that provider is entitled to witness such tests.

(b) If *AEMO* reasonably considers that:

(1) the analytic parameters for modelling of a *generating unit* or *generating system* are inadequate; or

(2) available information, including results from a previous test of a *generating unit* or *generating system*, are inadequate to determine parameters for an applicable model developed in accordance with the *Generating System Model Guidelines*, or otherwise agreed with *AEMO* under clause S5.2.4(c)(2),

AEMO may direct a *Network Service Provider* to require a *Generator* to conduct a test under paragraph (a), and *AEMO* may witness such a test.

(c) Adequate notice of not less than 15 *business days* must be given by the *Network Service Provider* to the *Generator* before the proposed date of a test under paragraph (a).

(d) The *Network Service Provider* must use its best endeavours to ensure that tests permitted under this clause 5.7.6 are conducted at a time which will minimise the departure from the *commitment* and *dispatch* that are due to take place at that time.

(e) If not possible beforehand, a *Generator* must conduct a test under this clause 5.7.6 at the next scheduled *outage* of the relevant *generating unit* and in any event within 9 months of the request.

(f) A *Generator* must provide any reasonable assistance requested by the *Network Service Provider* in relation to the conduct of tests.

(f1) If requested by a *Network Service Provider* who required the test under clause 5.7.6(a), a *Generator* must provide to the *Network Service Provider* any relevant information relating to the *plant* which is the subject of a test carried out under this clause 5.7.6, including model source code provided to *AEMO* under clause S5.2.4(b)(6).

(g) Tests conducted under this clause 5.7.6 must be conducted in accordance with test procedures agreed between the *Network Service Provider* and the relevant *Generator* and a *Generator* must not unreasonably withhold its agreement to test procedures proposed for this purpose by the *Network Service Provider*.

(h) A *Generator* must provide the test records obtained from a test under paragraph (a) to the *Network Service Provider*, who must derive the analytical parameters for the applicable model developed in accordance with

the *Generating System Model Guidelines*, or otherwise agreed with *AEMO* under clause S5.2.4(c)(2) and provide them and any new or revised model source code to the relevant *Generator*.

(i) The *Generator*, the *Network Service Provider* and *AEMO* must each bear its own costs associated with tests conducted under this clause 5.7.6 and no compensation is to be payable for financial losses incurred as a result of these tests or associated activities.

5.7.7 Inter-network power system tests

(a) For each kind of development or activity described in the first column of chart 1 below, the *Proponent* is as set out in the second column and the *Relevant Transmission Network Service Provider* ("*Relevant TNSP*") is as set out in the third column, respectively, opposite the description of the development or activity.

Chart 1

No.	**Kind of development or activity**	***Proponent***	***Relevant TNSP***
	column 1	**column 2**	**column 3**
1.	A new *transmission line* between two *networks*, or within a *transmission network*, that is anticipated to have a *material inter-network impact* is commissioned.	*Network Service Provider* in respect of the new *transmission line*.	*Proponent* and the *Transmission Network Service Provider* in respect of any *network* to which the *transmission line* is *connected*.
2.	An existing *transmission line* between two *networks*, or within a *transmission network*, that is anticipated to have a *material inter-network impact* is *augmented* or substantially modified.	*Network Service Provider* in respect of the *augmentation* or modification of the *transmission line*.	*Proponent* and the *Transmission Network Service Provider* in respect of any *network* to which the *transmission line* is *connected*.
3.	A new *generating unit* or *facility* of a *Customer* or a *network* development is commissioned that is anticipated to have a *material inter-network*	*Generator* in respect of the *generating unit* and associated *connection assets*. *Customer* in respect of the	*Transmission Network Service Provider* in respect of any *network* to which the *generating unit*, *facility* or *network* development is *connected* and, if a

No.	Kind of development or activity	***Proponent***	***Relevant TNSP***
	column 1	**column 2**	**column 3**
	impact.	*facility* and associated *connection assets*. *Network Service Provider* in respect of the relevant *network*.	*network* development, then also the *Proponent*.
4.	Setting changes are made to any *power system* stabilisers as a result of a *generating unit*, *facility* of a *Customer* or *network* development being commissioned, modified or replaced.	*Generator* in respect of the *generating unit*. *Customer* in respect of the *facility*. *Network Service Provider* in respect of the relevant *network*.	*Transmission Network Service Provider* in respect of any *transmission network* to which the *generating unit*, *facility* or *network* development is *connected*.
5.	Setting changes are made to any *power system* stabilisers as a result of a decision by *AEMO*, which are not covered by item 4 in this chart.	*AEMO*.	None.
6.	*AEMO* determines that a test is required to verify the performance of the *power system* in light of the results of planning studies or simulations or one or more system incidents.	*AEMO*.	None.

(b) A *Registered Participant*, not being a *Transmission Network Service Provider*, determined in accordance with clause 5.7.7(a) to be a *Proponent* for a development or activity detailed in chart 1, may require the *Relevant TNSP* corresponding to that development or activity to undertake on their behalf their obligations as the *Proponent* and, where the *Relevant TNSP* receives a written request to undertake those obligations, the *Relevant TNSP* must do so.

(c) Where, in this clause 5.7.7, there is a reference to a *Proponent* that reference includes a *Relevant TNSP* required in accordance with clause 5.7.7(b) to undertake the obligations of another *Registered Participant*.

(d) If a *Relevant TNSP* is required by a *Registered Participant* in respect of a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled load* or a *market network service*, any of which have a *nameplate rating* in excess of 30 MW, to act as a *Proponent* in accordance with clause 5.7.7(b), that *Relevant TNSP* is entitled to recover all reasonable costs incurred from the *Registered Participant* that required the *Relevant TNSP* to act as the *Proponent*.

(e) A *Registered Participant* wishing to undertake a development or conduct an activity listed in item 1, 2, 3 or 4 of chart 1 must notify *AEMO* not less than 80 *business days* before the *transmission line*, *generating unit*, *facility* or *network* development is planned to be commissioned, modified or replaced, giving details of the development or activity.

(f) If *AEMO* receives a notice under clause 5.7.7(e), then it must provide a copy of the notice to each *jurisdictional planning representative* and consult with each *jurisdictional planning representative* about the potential impact of the development or activity.

(g) *AEMO* or the *Relevant TNSP* for a development or activity may notify the *Proponent* of the development or activity that *AEMO* or the *Relevant TNSP* believes an *inter-network test* is required for that development or activity.

(h) *AEMO* or the *Relevant TNSP* may only give a notice under clause 5.7.7(g) if:

(1) *AEMO* or the *Relevant TNSP* considers that the development or activity may have a material impact on the magnitude of the *power transfer capability* of more than one *transmission network* and, in the circumstances, an *inter-network test* is required; or

(2) an *inter-network test* is required having regard to guidelines *published* under clause 5.7.7(k) and the surrounding circumstances.

(i) If the *Relevant TNSP* gives a notice under clause 5.7.7(g), then it must also promptly give a copy of the notice to *AEMO*.

(j) A *Registered Participant* undertaking a development or activity listed in chart 1 must provide information reasonably requested by *AEMO* or the *Relevant TNSP* for making an assessment under this clause.

(k) *AEMO* may develop, *publish* and amend from time to time, in accordance with the *Rules consultation procedures*, a set of guidelines to assist

Registered Participants to determine when an *inter-network test* may be required.

(l) *AEMO* and the *Relevant TNSP* must consider any relevant guidelines in determining whether an *inter-network test* is required.

(m) If *AEMO* or the *Relevant TNSP* gives notice under clause 5.7.7(g), then the *Proponent* must, in consultation with *AEMO*, prepare a draft *test program* for the *inter-network test* and provide it to *AEMO*, each *jurisdictional planning representative* and the *Relevant TNSP* (if the *Relevant TNSP* gave the notice).

(n) However, if *AEMO* determines that an *inter-network test* is required for a reason contemplated in item 5 or 6 of chart 1, then it must prepare a draft *test program* for the *inter-network test* in consultation with the *jurisdictional planning representatives* and provide that draft *test program* to each *jurisdictional planning representative*.

(o) If a *jurisdictional planning representative* considers that any changes should be made to a draft *test program*, the *jurisdictional planning representative* must, within 10 *business days* after being provided with the draft *test program*, make a recommendation to *AEMO* that identifies the changes it proposes should be made to the draft *test program*.

(p) *AEMO* must:

(1) *publish* a copy of the draft *test program* and any relevant changes recommended by any *jurisdictional planning representative* and invite interested *Registered Participants* to make written submissions; and

(2) only accept as valid submissions received not later than the closing date for submissions specified in the notice *publishing* the copy of the draft *test program* (not to be less than 14 days after the date of *publication*); and

(3) provide the *jurisdictional planning representatives* with copies of all valid submissions and seek any further recommendations they may have.

(q) *AEMO* must determine and *publish* in accordance with clause 3.13.13 the *test program* for an *inter-network test* after taking into account the recommendations of the *jurisdictional planning representatives* and any valid submissions received from *Registered Participants*.

(r) In determining the *test program*, *AEMO* must so far as practicable have regard to the following principles:

(1) *power system security* must be maintained in accordance with Chapter 4; and

(2) the variation from the *central dispatch* outcomes that would otherwise occur if there were no *inter-network test* should be minimised; and

(3) the duration of the tests should be as short as possible consistently with test requirements and *power system security*; and

(4) the test facilitation costs to be borne by the *Proponent* under paragraph (aa) should be kept to the minimum consistent with this paragraph.

(s) **[Deleted]**

(t) An *inter-regional test* must not be conducted within 20 *business days* after *AEMO publishes* the *test program* for the *inter-network test* determined by *AEMO* under clause 5.7.7(r).

(u) The *Proponent* in respect of an *inter-network test* must seek to enter into agreements with other *Registered Participants* to provide the test facilitation services identified in the *test program* in order to ensure that the *power system* conditions required by the *test program* are achieved.

(v) If the *Proponent* approaches another *Registered Participant* seeking to enter into an agreement under clause 5.7.7(u) then the *Proponent* and the *Registered Participant* must negotiate in good faith concerning the provision of the relevant test facilitation service.

(w) If:

(1) a *Proponent* approaches another *Registered Participant* as described in clause 5.7.7(v); and

(2) the *Proponent* and the other *Registered Participant* have not agreed the terms and conditions to be included in the agreement under which the *Registered Participant* will provide the test facilitation service requested within 15 *business days* of the approach,

then those terms and conditions must be determined in accordance with rule 8.2 and a dispute of this type is deemed to fall within clause 8.2.5(c)(2).

(x) If the dispute concerns the price which the *Proponent* is to pay for a test facilitation service, then it must be resolved applying the following principles:

(1) the other *Registered Participant* is entitled to recover the costs it incurs, and a reasonable rate of return on the capital it employs, in

providing the test facilitation service, determined taking into account the additional costs associated with:

(i) maintaining the equipment necessary to provide the test facilitation service;

(ii) any labour required to operate and maintain the equipment used to provide the test facilitation service; and

(iii) any materials consumed when the test facilitation service is utilised; and

(2) the other *Registered Participant* is entitled to be compensated for any commercial opportunities foregone by providing the test facilitation service.

(y) When the terms and conditions are determined in accordance with rule 8.2 under this clause 5.7.7, then the *Proponent* and the other *Registered Participant* must enter into an agreement setting out those terms and conditions.

(z) If *AEMO* is not the *Proponent* in respect of an *inter-network test*, the *Proponent* must:

(1) prior to the scheduled date of the *inter-network test*, confirm to *AEMO* that the test facilitation services identified in the *test program* will be available to be utilised, who will be providing them and the operational arrangements for utilising them;

(2) provide sufficient information to enable *AEMO* to utilise the test facilitation services in conducting the *inter-network test*; and

(3) respond promptly to any queries *AEMO* raises with the *Proponent* concerning the availability of the test facilitation services and *AEMO's* ability to utilise those services in conducting the *inter-network tests*.

(aa) The *Proponent* in respect of an *inter-network test* must bear all of the following costs associated with that *inter-network test*:

(1) any amounts payable under an agreement under which test facilitation services are provided;

(2) the *Proponent's* own costs associated with the *inter-network test* and in negotiating and administering the agreements referred to in clause 5.7.7(u); and

(3) if the *Proponent* is not *AEMO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which

there is an impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then the *Proponent* must enter into an agreement with *AEMO* to pay that amount to *AEMO*.

(ab) If the *Proponent* is *AEMO* and the amount of *settlements residue* on any *directional interconnector* for a *trading interval* during which there is an impact on *central dispatch* outcomes as a result of the *inter-network test* is negative, then *AEMO* must adjust that residue to be zero and must recover the amount as provided for in clause 2.11.3(b)(2A).

(ac) *AEMO* must establish operational conditions to achieve the particular *power transfer* levels for each stage of the *inter-network test* as contemplated by the *test program*:

(1) utilizing where practicable and economic to do so the test facilitation services identified in the *test program*; and

(2) otherwise, by applying to the minimum extent necessary to fulfil the test requirements, *inter-network testing constraints*.

(ad) An *inter-network test* must be coordinated by an officer nominated by *AEMO* who has authority to stop the test or any part of it or vary the procedure within pre-approved guidelines determined by *AEMO* if that officer considers any of these actions to be reasonably necessary.

(ae) Each *Registered Participant* must:

(1) cooperate with *AEMO* in planning, preparing for and conducting *inter-regional tests*;

(2) act in good faith in respect of, and not unreasonably delay, an *inter-network test*; and

(3) comply with any instructions given to it by *AEMO* under clause 5.7.7(af).

(af) *AEMO* may utilise test facilitation services under agreements entered into by the *Proponent* under this clause 5.7.7 during an *inter-network test* in order to achieve operational conditions on the *power system* which are reasonably required to achieve valid test results.

5.8 Commissioning

5.8.1 Requirement to inspect and test equipment

(a) A *Registered Participant* must ensure that any of its new or replacement equipment is inspected and tested to demonstrate that it complies with relevant *Australian Standards*, the *Rules* and any relevant *connection*

agreement prior to or within an agreed time after being *connected* to a *transmission network* or *distribution network,* and the relevant *Network Service Provider* is entitled to witness such inspections and tests.

(b) The *Registered Participant* must produce test certificates on demand by the relevant *Network Service Provider* showing that the equipment has passed the tests and complies with the standards set out in clause 5.8.1(a) before *connection* to a *network*, or within an agreed time thereafter.

5.8.2 Co-ordination during commissioning

A *Registered Participant* seeking to *connect* to a *network* must co-operate with the relevant *Network Service Provider*(s) and *AEMO* to develop procedures to ensure that the commissioning of the *connection* and *connected facility* is carried out in a manner that:

(a) does not adversely affect other *Registered Participants* or affect *power system security* or quality of *supply* of the *power system*; and

(b) minimises the threat of damage to any other *Registered Participant's* equipment.

5.8.3 Control and protection settings for equipment

(a) Not less than 3 months prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system* (other than replacement by identical equipment), the *Registered Participant* must submit to the relevant *Network Service Provider* sufficient design information including proposed parameter settings to allow critical assessment including analytical modelling of the effect of the new or replacement equipment on the performance of the *power system*.

(b) The *Network Service Provider* must*:*

(1) consult with other *Registered Participants* and *AEMO* as appropriate; and

(2) within 20 *business days* of receipt of the design information under clause 5.8.3(a), notify the *Registered Participant* and *AEMO* of any comments on the proposed parameter settings for the new or replacement equipment.

(c) If the *Network Service Provider's* comments include alternative parameter settings for the new or replacement equipment, then the *Registered Participant* must notify the *Network Service Provider* that it either accepts

or disagrees with the alternative parameter settings suggested by the *Network Service Provider*.

(d) The *Network Service Provider* and the *Registered Participant* must negotiate parameter settings that are acceptable to them both and if there is any unresolved disagreement between them, the matter must be referred to *AEMO* whose decision must be given within 20 *business days* of referral of the dispute and, once a decision is given, it is to be final.

(e) The *Registered Participant* and the *Network Service Provider* must co-operate with each other to ensure that adequate grading of protection is achieved so that faults within the *Registered Participant's facility* are cleared without adverse effects on the *power system*.

5.8.4 Commissioning program

(a) Prior to the proposed commencement of commissioning by a *Registered Participant* of any new or replacement equipment that could reasonably be expected to alter performance of the *power system*, the *Registered Participant* must advise the relevant *Network Service Provider* and *AEMO* in writing of the commissioning program including test procedures and proposed test equipment to be used in the commissioning.

(b) Notice under clause 5.8.4(a) must be given not less than 3 months prior to commencement of commissioning for a *connection* to a *transmission network* and not less than 1 month prior to commencement of commissioning for a *connection* to a *distribution network*.

(c) The relevant *Network Service Provider* and *AEMO* must, within 15 *business days* of receipt of such advice under clause 5.8.4(a), notify the *Registered Participant* either that they:

(1) agree with the proposed commissioning program; or

(2) require changes to it in the interest of maintaining *power system security*, safety or quality of *supply*.

(d) If the relevant *Network Service Provider* or *AEMO* require changes to the proposed commissioning program, then the parties must co-operate to reach agreement and finalise the commissioning program within a reasonable period.

(e) A *Registered Participant* must not commence the commissioning until the commissioning program has been finalised and the relevant *Network Service Provider* and *AEMO* must not unreasonably delay finalising a commissioning program.

5.8.5 Commissioning tests

(a) The relevant *Network Service Provider* and/or *AEMO* has the right to witness commissioning tests relating to new or replacement equipment that could reasonably be expected to alter performance of the *power system* or the accurate *metering* of *energy*.

(b) The relevant *Network Service Provider* must, within a reasonable period of receiving advice of commissioning tests, notify the *Registered Participant* whose new or replacement equipment is to be tested under this clause 5.8.5 whether or not it:

(1) wishes to witness the commissioning tests; and

(2) agrees with the proposed commissioning times.

(c) A *Registered Participant* whose new or replacement equipment is tested under this clause 5.8.5 must submit to the relevant *Network Service Provider* the commissioning test results demonstrating that a new or replacement item of equipment complies with the *Rules* or the relevant *connection agreement* or both to the satisfaction of the relevant *Network Service Provider*.

(d) If the commissioning tests conducted in relation to a new or replacement item of equipment demonstrates non-compliance with one or more requirements of the *Rules* or the relevant *connection agreement* then the *Registered Participant* whose new or replacement equipment was tested under this clause 5.8.5 must promptly meet with the *Network Service Provider* to agree on a process aimed at achievement of compliance of the relevant item with the *Rules*.

(e) On request by a *Network Service Provider*, *AEMO* may direct that the commissioning and subsequent *connection* of the *Registered Participant's* equipment must not proceed if the relevant equipment does not comply with the requirements described in clause 5.8.1(a).

5.9 Disconnection and Reconnection

5.9.1 Voluntary disconnection

(a) Unless agreed otherwise and specified in a *connection agreement*, a *Registered Participant* must give to the relevant *Network Service Provider* notice in writing of its intention to permanently *disconnect* a *facility* from a *connection point*.

(b) A *Registered Participant* is entitled, subject to the terms of the relevant *connection agreement*, to require voluntary permanent *disconnection* of its equipment from a *network* in which case appropriate operating procedures

necessary to ensure that the *disconnection* will not threaten *power system security* must be implemented in accordance with clause 5.9.2.

(c) The *Registered Participant* must pay all costs directly attributable to the voluntary *disconnection* and *decommissioning*.

5.9.2 Decommissioning procedures

(a) In the event that a *Registered Participant's facility* is to be permanently *disconnected* from a *network*, whether in accordance with clause 5.9.1 or otherwise, the *Network Service Provider* and the *Registered Participant* must, prior to such *disconnection* occurring, follow agreed procedures for *disconnection*.

(b) The *Network Service Provider* must notify *AEMO* and any *Registered Participants* with whom it has a *connection agreement* if it believes, in its reasonable opinion, the terms and conditions of such a *connection agreement* will be affected by procedures for *disconnection* or proposed procedures agreed with any other *Registered Participant.* The parties must negotiate any amendments to the procedures for *disconnection* or the *connection agreement* that may be required.

(c) Any *disconnection* procedures agreed to or determined under clause 5.9.2(a) must be followed by all relevant *Network Service Providers* and *Registered Participants*.

5.9.3 Involuntary disconnection

(a) *AEMO* may direct a *Network Service Provider* to, or a *Network Service Provider* may (either on its own initiative or in accordance with a direction from *AEMO*), *disconnect* a *Registered Participant's facilities* from a *network*, or a *Registered Participant's market loads*, in the following circumstances:

(1) pursuant to a direction for a *disconnection* made by a court under section 62 or 63 of the *National Electricity Law* or pursuant to regulations made under section 44AAG of the Trade Practices Act 1974 (Cth);

(2) during an emergency in accordance with clause 5.9.5;

(3) in accordance with the *National Electricity Law*; or

(4) in accordance with the provisions of the *Registered Participant's connection agreement.*

(b) In all cases of *disconnection* by a *Network Service Provider* at *AEMO's* direction during an emergency in accordance with clause 5.9.5, *AEMO* must

undertake a review under clause 4.8.15 and *AEMO* must then provide a report to the *Registered Participant*, the *AEMC* and the *AER* advising of the circumstances requiring such action.

(c) A *Network Service Provider* that has received a direction from *AEMO* under this clause 5.9.3 must comply with that direction promptly.

5.9.4 Direction to disconnect

(a) Where a *disconnection* is made pursuant to clause 5.9.3(a)(1), neither *AEMO* nor the relevant *Network Service Provider* is liable in any way for any loss or damage suffered or incurred by the *Registered Participant* by reason of the *disconnection* and neither *AEMO* nor the relevant *Network Service Provider* is obliged for the duration of the *disconnection* to fulfil any agreement to convey electricity to or from the *Registered Participant's facility.*

(b) A *Registered Participant* must not bring proceedings against *AEMO* or a *Network Service Provider* to seek to recover any amount for any loss or damage described in clause 5.9.4(a).

(c) *Transmission service* charges and *distribution service* charges must be paid by a *Registered Participant* whose *facilities* have been *disconnected* under this clause 5.9.4 as if any *disconnection* had not occurred.

(d) A *Network Service Provider* that has received a direction from *AEMO* to *disconnect* a *Registered Participant's facilities* in the circumstances described in clause 5.9.3(a)(1) must comply with that direction promptly.

5.9.4A Notification of disconnection

If the *AER* applies to a court for a direction, under section 62 or 63 of the *National Electricity Law* or pursuant to regulations made under section 44AAG of the Trade Practices Act 1974 (Cth), that a *Registered Participant's market loads* be *disconnected*, the *AER* must promptly notify *AEMO* and the *participating jurisdictions* which the *AER* considers may be affected.

5.9.5 Disconnection during an emergency

(a) Where *AEMO* may direct a *Network Service Provider* to *disconnect* a *Registered Participant's facilities* during an emergency under the *Rules* or otherwise, then *AEMO* may:

(1) require the relevant *Registered Participant* to reduce the *power transfer* at the proposed point of *disconnection* to zero in an orderly manner and then direct a *Network Service Provider* to *disconnect* the *Registered Participant's facility* by automatic or manual means; or

(2) direct a *Network Service Provider* to immediately *disconnect* the *Registered Participant's facilities* by automatic or manual means where, in *AEMO's* reasonable opinion, it is not appropriate to follow the procedure set out in clause 5.9.5(a)(1) because action is urgently required as a result of a threat to safety of persons, hazard to equipment or a threat to *power system security*.

(b) A *Network Service Provider* that has received a direction from *AEMO* under this clause 5.9.5 must comply with that direction promptly.

5.9.6 Obligation to reconnect

(a) Either *AEMO* (by directing the *Network Service Provider*) or the relevant *Network Service Provider* (either on its own initiative or in accordance with a direction from *AEMO*) must reconnect a *Registered Participant's facilities* to a *transmission network* or *distribution network* at a reasonable cost to the *Registered Participant* as soon as practicable if:

(1) *AEMO* is reasonably satisfied that there no longer exists an emergency due to which the *Registered Participant's facilities* were *disconnected* under clause 5.9.5;

(2) *AEMO* is reasonably satisfied that there no longer exists a reason for the *disconnection* under the *National Electricity Law* or the *Registered Participant's connection agreement*;

(3) one of the following occurs:

(i) a breach of the *Rules* giving rise to the *disconnection* has been remedied;

(ii) where the breach is not capable of remedy, compensation has been agreed and paid by the *Registered Participant* to the affected parties or, failing agreement, the amount of compensation payable has been determined in accordance with the dispute resolution procedure in rule 8.2 and that amount has been paid;

(iii) where the breach is not capable of remedy and the amount of compensation has not been agreed or determined, assurances for the payment of reasonable compensation have been given to the satisfaction of *AEMO*, the *Network Service Provider* and the parties affected; or

(iv) the *Registered Participant* has taken all necessary steps to prevent the re-occurrence of the breach and has delivered binding undertakings to *AEMO* or the *Network Service Provider* that the breach will not re-occur.

(b) In carrying out its obligations under clause 5.9.6(a), *AEMO* must, to the extent practicable, arrange for the implementation of an equitable sharing of the reconnection of *facilities* across *interconnected regions* up to the *power transfer capability* of the *network* and, in performing these obligations within a *region*, both *AEMO* and the relevant *Network Service Provider* must, to the extent practicable, give priority to reconnection of a *region's sensitive loads.*

(c) A *Network Service Provider* that has received a direction from *AEMO* under this clause 5.9.6 must comply with that direction promptly.

Schedule 5.1a - System standards

S5.1a.1 Purpose

The purpose of this schedule is to establish *system standards* that:

(a) are necessary or desirable for the safe and reliable operation of the *facilities* of *Registered Participants*;

(b) are necessary or desirable for the safe and reliable operation of equipment;

(c) could be reasonably considered *good electricity industry practice*; and

(d) seek to avoid the imposition of undue costs on the industry or *Registered Participants*.

A *Registered Participant* should not, by virtue of this schedule, rely on *system standards* being fully complied with at a *connection point* under all circumstances. However, a *Registered Participant* should expect to be reasonably informed of circumstances where the standard of *supply* at its *connection points* will not conform to the *system standards*.

Except for standards of *frequency* and system stability, a *Registered Participant* should have the opportunity to negotiate or renegotiate relevant terms of a *connection agreement* (including relevant charges), to improve the standard of *supply* to the level of the *system standard*.

The *system standards* are set out below.

S5.1a.2 Frequency

The *frequency operating standards* are *system standards* and are as determined by the *Reliability Panel* and *published* by the *AEMC*.

S5.1a.3 System stability

The *power system* should remain in synchronism and be stable:

(a) **Transient stability:** following any *credible contingency event*; and

(b) **Oscillatory stability:** in the absence of any *contingency event*, for any level of *inter-regional* or *intra-regional* power transfer up to the applicable operational limit; and

(c) **Voltage stability:** stable *voltage* control must be maintained following the most severe *credible contingency event*.

For the purposes of clause S5.1a.3 a *credible contingency event* includes the application of a fault (other than a three-phase fault) to any part of the *power system* and de-energisation of the faulted element within the allowable clearance time applicable to that element according to clause S5.1a.8.

The halving time of any *inter-regional* or *intra-regional* oscillation, being the time for the amplitude of an oscillation to reduce by half, should be less than 10 seconds. To allow for planning and operational uncertainties, the *power system* should be planned and operated to achieve a halving time of 5 seconds.

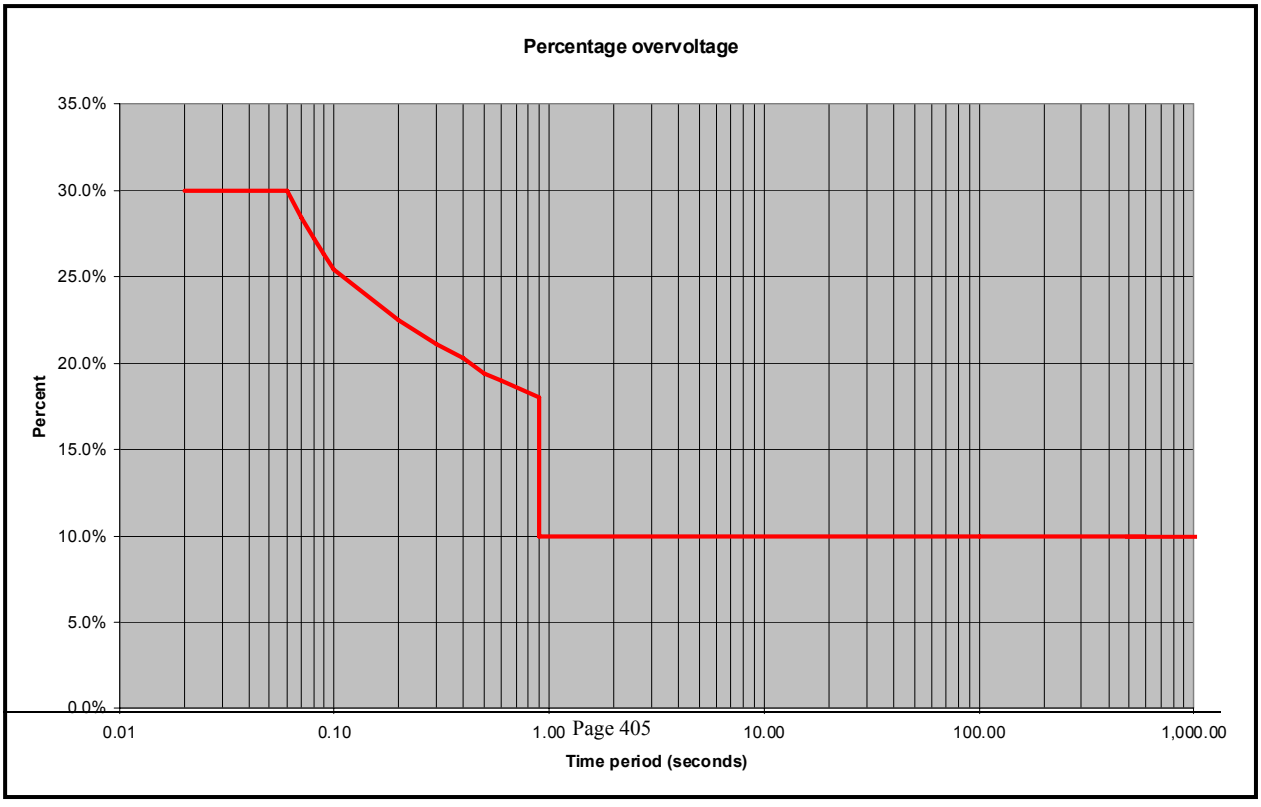
S5.1a.4 Power frequency voltage

Except as a consequence of a *contingency event*, the *voltage* of *supply* at a *connection point* should not vary by more than 10 percent above or below its *normal voltage*, provided that the *reactive power* flow and the *power factor* at the *connection point* is within the corresponding limits set out in the *connection agreement*.

As a consequence of a *credible contingency event*, the *voltage* of *supply* at a *connection point* should not rise above its *normal voltage* by more than a given percentage of *normal voltage* for longer than the corresponding period shown in Figure S5.1a.1 for that percentage.

As a consequence of a *contingency event*, the *voltage* of *supply* at a *connection point* could fall to zero for any period.

Figure S5.1a.1



S5.1a.5 Voltage fluctuations

The *voltage* fluctuation level of *supply* should be less than the "compatibility levels" set out in 1 of *Australian Standard* AS/NZS 61000.3.7:2001. To facilitate the application of this standard *Network Service Providers* must establish "planning levels" for their *networks* as provided for in the *Australian Standard.*

The following principles apply to the use of the shared network:

(a) the sharing between *Network Users* of the capability of *connection assets* to withstand *voltage* fluctuations is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.5 of schedule 5.1; and

(b) to the extent practicable, the costs of managing or abating the impact of *voltage* fluctuations in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the *voltage* fluctuations.

S5.1a.6 Voltage waveform distortion

Harmonic *voltage* distortion level of *supply* should be less than the "compatibility levels" defined in Table 1 of *Australian Standard* AS/NZS 61000.3.6:2001. To facilitate the application of this standard *Network Service Providers* must establish "planning levels" for their *networks* as provided for in the *Australian Standard.*

The following principles apply to the use of the shared network:

(a) the sharing between *Network Users* of the capability of *connection assets* to absorb or mitigate harmonic *voltage* distortion is to be managed by *Network Service Providers* in accordance with the provisions of clause S5.1.6 of schedule 5.1; and

(b) to the extent practicable, the costs of managing or abating the impact of harmonic distortion in excess of the costs which would result from the application of an *automatic access standard* are to be borne by those *Network Users* whose *facilities* cause the harmonic *voltage* distortion.

S5.1a.7 Voltage unbalance

Except as a consequence of a *contingency event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 2 of Table S5.1a.1, when determined over a 30-minute averaging period.

As a consequence of a *credible contingency event*, the average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out

in column 3 of Table S5.1a.1, when determined over a 30-minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary by more than the amount set out in column 4 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 10-minute averaging period.

The average *voltage* unbalance, measured at a *connection point*, should not vary more often than once per hour by more than the amount set out in column 5 of Table S5.1a.1 for the relevant nominal *supply voltage*, when determined over a 1-minute averaging period.

For the purpose of this clause, *voltage* unbalance is measured as negative sequence voltage.

Table S5.1a.1

Nominal supply voltage (kV)	**Maximum negative sequence voltage (% of nominal voltage)**			
Column 1	**Column 2**	**Column 3**	**Column 4**	**Column 5**
	no contingency event	**credible contingency event**	**general**	**once per hour**
	30 minute average	**30 minute average**	**10 minute average**	**1 minute average**
more than 100	0.5	0.7	1.0	2.0
more than 10 but not more than 100	1.3	1.3	2.0	2.5
10 or less	2.0	2.0	2.5	3.0

S5.1a.8 Fault clearance times

(a) Faults anywhere within the *power system* should be cleared sufficiently rapidly that:

(1) the *power system* does not become unstable as a result of faults that are *credible contingency events*;

(2) *inter-regional* or *intra-regional power transfers* are not unduly *constrained*; and

(3) consequential equipment damage is minimised.

(b) The *fault clearance time* of a primary *protection system* for a *short circuit fault* of any *fault type* anywhere:

(1) within a *substation*;

(2) within *connected plant*; or

(3) on at least the half of a power line nearer to the *protection system*,

should not exceed the relevant time in column 2 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.

(c) The *fault clearance time* of a primary *protection system* for a *short circuit fault* of any *fault type* anywhere on the remote portion of a power line for which the near portion is protected by a primary *protection system* under clause S5.1a8(b) should not exceed the relevant time in column 3 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.

(d) The *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* for a *short circuit fault* of any *fault type* should not exceed the relevant time in column 4 of Table S5.1a.2 for the nominal *voltage* that applies at the fault location.

(e) The owner of the faulted element may require shorter *fault clearance times* to minimise *plant* damage.

(f) The allowable *fault clearance times* specified in Table S5.1a.2 apply in accordance with the provisions of clause S5.1.9 to *facilities* constructed or modified on or after the *performance standards commencement date.*

(g) For *facilities* other than those referred to in clause S5.1a.8(f), the applicable allowable *fault clearance times* must be derived by the relevant *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

Table S5.1a.2

Nominal voltage at fault location(kV)	**Time(milliseconds)**		
Column 1	**Column 2**	**Column 3**	**Column 4**
400kV and above	80	100	175
at least 250kV but less than 400kV	100	120	250
more than 100kV but less than 250kV	120	220	430

less than or equal 100 kV	As necessary to prevent *plant* damage and meet stability requirements

Schedule 5.1 - Network Performance Requirements to be Provided or Co-ordinated by Network Service Providers

S5.1.1 Introduction

This schedule describes the planning, design and operating criteria that must be applied by *Network Service Providers* to the *transmission networks* and *distribution networks* which they own, operate or control. It also describes the requirements on *Network Service Providers* to institute consistent processes to determine the appropriate technical requirements to apply for each *connection* enquiry or *application to connect* processed by the *Network Service Provider* with the objective that all *connections* satisfy the requirements of this schedule.

The criteria and the obligations of *Registered Participants* to implement them, fall into two categories, namely:

(a) those required to achieve adequate levels of *network power transfer capability* or quality of *supply* for the common good of all, or a significant number of, *Registered Participants*; and

(b) those required to achieve a specific level of *network service* at an individual *connection point.*

A *Network Service Provider* must:

(1) fully describe the quantity and quality of *network services* which it agrees to provide to a person under a *connection agreement* in terms that apply to the *connection point* as well as to the *transmission or distribution system* as a whole;

(2) ensure that the quantity and quality of those *network services* are not less than could be provided to the relevant person if the *national grid* were planned, designed and operated in accordance with the criteria set out in this clause S5.1.1 and recognising that levels of service will vary depending on location of the *connection point* in the *network*; and

(3) observe and apply the relevant provisions of the *system standards* in accordance with this schedule 5.1.

To the extent that this schedule 5.1 does not contain criteria which are relevant to the description of a particular *network service*, the *Network Service Provider* must describe the *network service* in terms which are fair and reasonable.

This schedule includes provisions for *Network Service Providers* and *Registered Participants* to negotiate the criteria to apply to a *connection* within defined ranges between a lower bound (*minimum access standard*) and an upper bound (*automatic access standard*). All criteria which are intended to apply to a

connection must be recorded in a *connection agreement*. Where it is intended to apply a *negotiated access standard* in accordance with clause 5.3.4A of the *Rules*, the *Network Service Provider* must first be satisfied that the application of the *negotiated access standard* will not adversely affect other *Registered Participants*.

S5.1.2 Network reliability

S5.1.2.1 Credible contingency events

Network Service Providers must plan, design, maintain and operate their *transmission networks* and *distribution networks* to allow the transfer of power from *generating units* to *Customers* with all *facilities* or equipment associated with the *power system* in service and may be required by a *Registered Participant* under a *connection agreement* to continue to allow the transfer of power with certain facilities or *plant* associated with the *power system* out of service, whether or not accompanied by the occurrence of certain faults (called "*credible contingency events*").

The following *credible contingency events* and practices must be used by *Network Service Providers* for planning and operation of *transmission networks* and *distribution networks* unless otherwise agreed by each *Registered Participant* who would be affected by the selection of *credible contingency events*:

(a) The *credible contingency events* must include the *disconnection* of any single *generating unit* or *transmission line*, with or without the application of a single circuit two-phase-to-ground solid fault on lines operating at or above 220 kV, and a single circuit three-phase solid fault on lines operating below 220 kV. The *Network Service Provider* must assume that the fault will be cleared in primary protection time by the faster of the duplicate protections with installed intertrips available. For existing *transmission lines* operating below 220 kV but above 66 kV a two-phase to earth fault criterion may be used if the modes of operation are such as to minimise the probability of three-phase faults occurring and operational experience shows this to be adequate, and provided that the *Network Service Provider* upgrades performance when the opportunity arises.

(b) For lines at any *voltage* above 66 kV which are not protected by an overhead earth wire and/or lines with tower footing resistances in excess of 10 ohms, the *Network Service Provider* may extend the criterion to include a single circuit three-phase solid fault to cover the increased risk of such a fault occurring. Such lines must be examined individually on their merits by the relevant *Network Service Provider*.

(c) For lines at any *voltage* above 66 kV a *Network Service Provider* must adopt operational practices to minimise the risk of slow fault clearance in

case of inadvertent closing on to earths applied to equipment for maintenance purposes. These practices must include but not be limited to:

(1) Not leaving lines equipped with intertrips alive from one end during maintenance; and

(2) *Off-loading* a three terminal (tee connected) line prior to restoration, to ensure switch on to fault *facilities* are operative.

(d) The *Network Service Provider* must ensure that all *protection systems* for lines at a *voltage* above 66 kV, including associated intertripping, are well maintained so as to be available at all times other than for short periods (not greater than eight hours) while the maintenance of a *protection system* is being carried out.

S5.1.2.2 Network service within a region

The following paragraphs of this section set out minimum standards for certain *network services* to be provided to *Registered Participants* by *Network Service Providers* within a *region*. The amount of *network* redundancy provided must be determined by the process set out in clause 5.6.2 of the *Rules* and is expected to reflect the grouping of *generating units*, their expected capacity factors and availability and the size and importance of *Customer* groups.

The standard of service to be provided at each *connection point* must be included in the relevant *connection agreement*, and must include a *power transfer capability* such as that which follows:

(a) In the *satisfactory operating state*, the *power system* must be capable of providing the highest reasonably expected requirement for *power transfer* (with appropriate recognition of diversity between individual peak requirements and the necessity to withstand *credible contingency events*) at any time.

(b) During the most critical single element *outage* the *power transfer* available through the *power system* may be:

(1) zero (single element *supply*);

(2) the defined capacity of a backup *supply*, which, in some cases, may be provided by another *Network Service Provider*;

(3) a nominated proportion of the normal *power transfer capability* (eg 70 percent); or

(4) the normal *power transfer capability* of the *power system* (when required by a *Registered Participant*).

In the case of clauses S5.1.2.2(b)(2) and (3) the available capacity would be exceeded sufficiently infrequently to allow maintenance to be carried out on each *network* element by the *Network Service Provider*. A *connection agreement* may state the expected proportion of time that the normal capability will not be available, and the capability at those times, taking account of specific design, locational and seasonal influences which may affect performance, and the random nature of element *outages*.

A *connection agreement* may also state a conditional *power transfer capability* that allows for both circuits of a double circuit line or two closely parallel circuits to be out of service.

S5.1.2.3 Network service between regions

The *power transfer capability* between *regions* must be determined by the process set out in rules 5.6 and 5.6A.

The following paragraphs of this section set out a framework within which *Network Service Providers* must describe to *AEMO* the levels of *network service* that apply for *power transfer* between *regions*. In cases where *power transfer capability* is determined by stability considerations on the *power system* (refer to clause S5.1.8 of this schedule) it is expected that line *outages* within *transmission networks* within a region will weaken the *network* so as to result in reduced *power transfer capability* even in the absence of *outages* of the lines between *regions*.

(a) In the *satisfactory operating state* the *power transfer capability* between *regions* is defined by a multi-term equation for each *connection* between *regions* which takes account of all *power system* operating conditions which can significantly impact on performance. The majority of these operating conditions are the result of *market* operation and are outside the control of the *Network Service Provider*. In the *satisfactory operating state* the *network* must be planned by the *Network Service Provider* and operated by *AEMO* to withstand the impact of any *single contingency* with severity less than the *credible contingency events* stated in clause S5.1.2.1.

(b) During critical single element *outages* reduced *power transfer capabilities* will apply. In those cases where *outage* of the remaining element will result in breaking of the *connection* between the *regions AEMO* must provide for the effect on *power system frequency* in the separate *transmission systems* following this event when determining the maximum *power transfer*.

S5.1.3 Frequency variations

A *Network Service Provider* must ensure that within the *extreme frequency excursion tolerance limits* all of its *power system* equipment will remain in service unless that equipment is required to be switched to give effect to *load shedding* in accordance with clause S5.1.10, or is required by *AEMO* to be switched for operational purposes.

Sustained operation outside the *extreme frequency excursion tolerance limits* need not be taken into account by *Network Service Providers* in the design of *plant* which may be *disconnected* if this is necessary for the protection of that *plant*.

S5.1.4 Magnitude of power frequency voltage

A *Transmission Network Service Provider* must plan and design its *transmission system* and equipment for control of *voltage* such that the minimum steady state *voltage* magnitude, the maximum steady state *voltage* magnitude and variations in *voltage* magnitude are consistent with the levels stipulated in clause S5.1a.4 of the *system standards*.

(a) The *Network Service Provider* must determine the *automatic access standard* for the *voltage* of *supply* at the *connection point* such that the *voltage* may vary in accordance with clause S5.1a.4 of the *system standards*.

(b) The *Network Service Provider* must determine the *minimum access standard* for the *voltage of supply* at the *connection point* such that the *voltage* may vary:

  (1) as a consequence of a *credible contingency event* in accordance with clause S5.1a.4; and

  (2) otherwise, between 95 percent and 105 percent of the target *voltage*.

(c) For the purposes of clause S5.1.4(b) the target *voltage* must be determined as follows:

  (1) if the *connection point* is connected to a *transmission line* (but not through a *transformer*), the *Network Service Provider* must determine the target *voltage* in consultation with *AEMO* taking into account the capability of existing *facilities* that are subject to that *supply voltage*; and

  (2) otherwise, *Network Users* that share the same *supply voltage* must jointly determine the target *voltage* which may be specified to vary with aggregate *loading level*;

  provided that at all times the *supply voltage* remains between 90 percent and 110 percent of the normal voltage determined in accordance with clause S5.1a.4 except as a consequence of a *contingency event.*

(d) For the purposes of this clause, the *voltage* of *supply* is measured as the *RMS phase voltage.*

Where the independent control of *voltage* at the *connection point* is possible without adverse impact on *voltage* control at another *connection point*, the *Network Service Provider* must make reasonable endeavors to meet the request.

The target *voltage* and any agreement to a target range of *voltage* magnitude must be specified in the relevant *connection agreement*. The agreement may include a different target range in the *satisfactory operating state* and after a *credible contingency event* (and how these target ranges may be required to vary with *loading*).

A *Network Service Provider* must ensure that each *facility* that is part of its *transmission network* or *distribution network* is capable of continuous uninterrupted operation in the event that variations in *voltage* magnitude occur due to faults external to the *facility*. The design of a *facility* should anticipate the likely time duration and magnitude of variations in the power-*frequency* phase *voltages* which may arise dependent on the nature and location of the fault.

S5.1.5 Voltage fluctuations

A *Network Service Provider* must use reasonable endeavours to design and operate its *transmission system* or *distribution system* and include conditions in *connection agreements* in relation to the permissible variation with time of the power *generated* or *load* taken by a *Network User* to ensure that other *Network Users* are supplied with a power-*frequency voltage* which fluctuates to an extent that is less than the levels stipulated in accordance with the provisions of clause S5.1a.5 of the *system standards* and this clause S5.1.5.

In accordance with AS/NZS 61000.3.7:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3, a *Network Service Provider* must determine "Planning Levels" for *connection points* on their *network* in order to maintain *voltage* fluctuation levels for all supply points to customers supplied from their *network* below the "Compatibility Levels" defined in Table 1 of AS/NZS 61000.3.7:2001.

The *Network Service Provider* must allocate emission limits in response to a *connection* enquiry or an *application to connect* and evaluate the acceptability for *connection* of fluctuating sources as follows:

(a) *Automatic access standard:* the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.7:2001.

(b) *Minimum access standard:* subject to clause S5.1.5(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the stage 3 evaluation procedure defined in AS/NZS61000.3.7:2001.

(c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User*

if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.

(d) If for existing customer *connections* the level of *voltage* fluctuation is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all reasonable works necessary to meet the technical standards in this schedule or to permit the proposed new *connection* within the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for excursions in *voltage* fluctuations above the levels defined above is limited to *voltage* fluctuations caused by *network plant* and the pursuit of all reasonable measures available under the *Rules* and its *connection agreements*.

S5.1.6 Voltage harmonic or voltage notching distortion

A *Network Service Provider* must use reasonable endeavours to design and operate its *network* and include conditions in *connection agreements* to ensure that the effective harmonic *voltage* distortion at any point in the *network* will be limited to less than the levels stipulated in accordance with the provisions of clause S5.1a.6 of the *system standards* and this clause S5.1.6.

In accordance with AS/NZS 61000.3.6:2001 and guidelines published by *Standards Australia* and applying the assumption that *Customers* will comply with their obligations under schedule 5.3 *Network Service Providers* must determine "Planning Levels" for *connection points* on their *network* in order to maintain harmonic *voltage* distortion for all supply points to customers supplied from their *network* below the "Compatibility Levels" defined in Table 1 of AS/NZS 61000.3.6:2001.

The *Network Service Provider* must allocate emission limits to a connection enquiry or an *application to connect* and must evaluate the acceptability for *connection* of distorting sources as follows:

(a) *Automatic access standard*: the *Network Service Provider* must allocate emission limits no more onerous than the lesser of the acceptance levels determined in accordance with either of the stage 1 or the stage 2 evaluation procedures defined in AS/NZS 61000.3.6:2001.

(b) *Minimum access standard*: subject to clause S5.1.6(c), the determination by the *Network Service Provider* of acceptable emission limits must be undertaken in consultation with the party seeking *connection* using the Stage 3 evaluation procedure defined in AS/NZS61000.3.6:2001.

(c) In respect of each new *connection* at a level of performance below the *automatic access standard* the *Network Service Provider* must include provisions in the relevant *connection agreement* requiring the *Network User* if necessary to meet the *system standards* or allow connection of other *Network Users* to either upgrade to the *automatic access standard* or fund the reasonable cost of the works necessary to mitigate their effect of connecting at a standard below the *automatic access standard*.

(d) If for existing customer *connections* the level of harmonic *voltage* distortion is, or may be, exceeded as a result of a proposed new *connection*, the *Network Service Provider* must, if the cause of that excessive level cannot be remedied by enforcing the provisions of existing *connection agreements*, undertake all works necessary to meet the technical standards in this schedule or to permit a proposed new *connection* within the *automatic access standard* defined in clause S5.3.8 and the requirements stated in this clause.

For other than a new *connection* in accordance with the preceding paragraph, the responsibility of a *Network Service Provider* for harmonic *voltage* distortion outside the range defined above is limited to harmonic *voltage* distortion caused by *network plant* and the pursuit of all measures available under the *Rules* and its *connection agreements*.

S5.1.7 Voltage unbalance

(a) A *Transmission Network Service Provider* must balance the effective impedance of the phases of its *network*, and a *Distribution Network Service Provider* must balance the current drawn in each phase at each of its *connection points*, so as to achieve average levels of negative sequence *voltage* at all *connection point*s that are equal to or less than the values set out in Table S5.1a.1 as determined in accordance with the accompanying provisions of clause S5.1a.7 of the *system standards.*

(b) A *Network Service Provider* must include conditions in *connection agreements* to ensure that a *Connection Applicant* will balance the current drawn in each phase at each of its *connection points* so as to achieve:

(1) for those *Network Users* listed in clause S5.3(a): the levels permitted in accordance with clause S5.3.6 of schedule 5.3;

(2) for *Market Network Service Providers*: the levels permitted in accordance with clause S5.3a.9 of schedule 5.3a;

(3) otherwise: the average levels of negative sequence *voltage* at each of its *connection points* that are equal to or less than the values set out in Table S5.1a.1 and the accompanying provisions of clause S5.1a.7 of the *system standards.*

The responsibility of the *Network Service Provider* for *voltage* unbalance outside the ranges defined above is limited to *voltage* unbalance caused by the *network* and the pursuit of all measures available under the *Rules* and its *connection agreements.*

(c) A *Network Service Provider* must include conditions in *connection agreements* to ensure that each *Generator* will balance:

(1) the *voltage generated* in each phase of its *generating system*; and

(2) when not generating, the current drawn in each phase,

in order to achieve average levels of negative sequence *voltage* at each of the *generating system connection points* due to phase imbalances within the *generating plant* that are not more than the values determined by the *Network Service Provider* to achieve average levels of negative sequence *voltage* at the *connection points* of other *Network Users* in accordance with clause S5.1a.7.

(d) When including conditions under paragraph (c), the *Network Service Provider* must have regard to the capabilities of the relevant *generating plant* technology.

S5.1.8 Stability

In conforming with the requirements of the *system standards*, the following criteria must be used by *Network Service Providers* for both planning and operation:

For stable operation of the *national grid*, both in a *satisfactory operating state* and following any *credible contingency events* described in clause S5.1.2.1:

(a) the *power system* will remain in synchronism;

(b) damping of *power system* oscillations will be adequate; and

(c) *voltage* stability criteria will be satisfied.

Damping of *power system* oscillations must be assessed for planning purposes according to the design criteria which states that *power system damping* is considered adequate if after the most critical *credible contingency event*, simulations calibrated against past performance indicate that the halving time of the least damped electromechanical mode of oscillation is not more than five seconds.

To assess the damping of *power system* oscillations during operation, or when analysing results of tests such as those carried out under clause 5.7.7 of the *Rules*, the *Network Service Provider* must take into account statistical effects. Therefore, the *power system damping* operational performance criterion is that at a given

operating point, real-time monitoring or available test results show that there is less than a 10 percent probability that the halving time of the least damped mode of oscillation will exceed ten seconds, and that the average halving time of the least damped mode of oscillation is not more than five seconds.

The *voltage* control criterion is that stable *voltage* control must be maintained following the most severe *credible contingency event*. This requires that an adequate *reactive power* margin must be maintained at every *connection point* in a *network* with respect to the *voltage* stability limit as determined from the *voltage*/reactive *load* characteristic at that *connection point*. Selection of the appropriate margin at each *connection point* is at the discretion of the relevant *Network Service Provider*, subject only to the requirement that the margin (expressed as a capacitive *reactive power* (in MVAr)) must not be less than one percent of the maximum fault level (in MVA) at the *connection point*.

In planning a *network* a *Network Service Provider* must consider *non-credible contingency events* such as *busbar* faults which result in tripping of several circuits, uncleared faults, double circuit faults and multiple contingencies which could potentially endanger the stability of the *power system*. In those cases where the consequences to any *network* or to any *Registered Participant* of such events are likely to be severe disruption a *Network Service Provider* and/or a *Registered Participant* must install emergency controls within the *Network Service Provider's* or *Registered Participant's* system or in both, as necessary, to minimise disruption to any *transmission* or *distribution network* and to significantly reduce the probability of cascading failure.

A *Registered Participant* must co-operate with a *Network Service Provider* to achieve stable operation of the *national grid* and must use all reasonable endeavours to negotiate with the *Network Service Provider* regarding the installation of emergency controls as described in the previous paragraph. The cost of installation, maintenance and operation of the emergency controls must be borne by the *Network Service Provider* who is entitled to include this cost when calculating the *Transmission Customer use of system* price.

S5.1.9 Protection systems and fault clearance times

Network Users

(a) A *Network Service Provider* must determine the *automatic access standard* and *minimum access standard* that applies to the protection zone of each *protection system* in relation to the *connection point* and the *plant* to be *connected*, as follows:

(1) The *automatic access standard* for *fault clearance time* for any *fault type* is the lesser of the *system standard* set out in clause S5.1a.8 that applies to the highest nominal *voltage* within the *protection system's* protection zone and the corresponding *minimum access standard*

determined under clause S5.1.9(a)(2) or clause S5.1.9(a)(3) as applicable.

(2) The *minimum access standard* for *fault clearance time* of a primary *protection system* is:

(i) for a *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a *fault* at the *connection point* were the *system standard* set out in clause S5.1a.8 that applies to the nominal *voltage* at the *connection point*; and

(ii) for a *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:

(A) if a two phase to ground fault in that protection zone constitutes a *credible contingency event*, the corresponding *fault clearance time* for a two phase to ground *short circuit fault* in that protection zone as determined under clause S5.1.9(a)(2)(i); and

(B) otherwise, the shortest of the *fault clearance times* for a two phase to ground *short circuit fault* in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clause S5.1.9(a)(2)(i) or clause S5.1.9(e).

(3) The *minimum access standard* for *fault clearance time* of a *breaker fail protection system* or similar back-up *protection system* is the longest time such that a *short circuit fault* of any *fault type* that is cleared in that time would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.

(b) The negotiation of access standards in relation to paragraph (a) must involve *AEMO* under clause 5.3.4A(c) of the *Rules*.

Transmission systems and distribution systems

(c) Subject to clauses S5.1.9(k) and S5.1.9(l), a *Network Service Provider* must provide sufficient primary *protection systems* and back-up *protection systems* (including *breaker fail protection systems*) to ensure that a fault of any *fault type* anywhere on its *transmission system* or *distribution system* is

automatically *disconnected* in accordance with clause S5.1.9(e) or clause S5.1.9(f).

(d) If the *fault clearance time* determined under clause S5.1.9(e) of a primary *protection system* for a two phase to ground *short circuit fault* is less than 10 seconds, the primary *protection system* must have sufficient redundancy to ensure that it can clear *short circuit faults* of any *fault type* within the relevant *fault clearance time* with any single protection element (including any communications facility upon which the *protection system* depends) out of service.

(e) The *fault clearance time* of a primary *protection system* of a *Network Service Provider* must not exceed:

(1) for any *fault type* that constitutes a *credible contingency event* in the relevant protection zone, the longest time such that a *short circuit fault* of that *fault type* that is cleared in that time would not cause the *power system* to become unstable when operating at any level of *inter-regional* or *intra-regional power transfer* that would be permissible (taking into account all other limiting criteria) if the *fault clearance time* for such a fault in that protection zone were the relevant *system standard* set out in clause S5.1a.8; and

(2) for any *fault type* that does not constitute a *credible contingency event* in the relevant protection zone:

(i) if a two phase to ground fault in that protection zone is a *credible contingency event*, the corresponding *fault clearance time* for a two phase to ground fault in that protection zone as determined under clause S5.1.9(e)(1); and

(ii) otherwise, the shortest of the *fault clearance times* for a two phase to ground fault in each adjoining protection zone (excluding *transformer* protection zones and dead zones) as determined under clauses S5.1.9(a)(2)(i), S5.1.9(e)(1)or S5.1.9(e)(2)(i).

(f) The *fault clearance time* of each *breaker fail protection system* or similar back-up *protection system* of a *Network Service Provider* must be such that a *short circuit fault* of any *fault type* that is cleared in that time would not damage any part of the *power system* (other than the faulted element) while the fault current is flowing or being interrupted.

(g) A *Network Service Provider* must demonstrate to *AEMO* that each *fault clearance time* for a primary *protection system* that is longer than the relevant *system standard* set out in clause S5.1a.8 and is less than 10 seconds would not cause or require an *inter-regional* or *intra-regional power transfer capability* to be reduced.

(h) A *Network Service Provider* must include in each *connection agreement* entered into after the *performance standards commencement date*:

(1) the *fault clearance times* for each *fault type* of each of its *protection systems* that could reasonably be expected to interrupt *supply* to or from the relevant *connection point*; and

(2) an agreement to not increase those *fault clearance times* without the prior written agreement of the other party.

(i) *Network Service Providers* must coordinate and cooperate with *Network Users* to implement *breaker fail* protection for circuit breakers provided to isolate the *Network User's facility* from the *Network Service Provider's facilities*.

(j) Where practicable and economic to achieve, new network investment should meet the *system standard* for *fault clearance times* as specified in clause S5.1a.8 for two phase to ground *short circuit faults*.

(k) A primary *protection system* may clear faults other than *short circuit faults* slower than the relevant *fault clearance time*, provided that such faults would be cleared sufficiently promptly to not adversely impact on *power system security* compared with its operation for the corresponding *short circuit fault.* In the case of a fault within equipment at a station, the corresponding *short circuit fault* is to be taken as a two phase to ground *short circuit fault* at the external connections of the equipment.

(l) *Protection systems* may rely on *breaker fail protection systems* or other back-up *protection systems* to completely clear faults of any *fault type* that:

(1) occur within a *substation* between a protection zone and a circuit breaker adjacent to that protection zone that is required to open to clear the fault (a "dead zone"); and

(2) remain connected through a power line or *transformer* after operation of a primary *protection system*,

provided that the relevant *Network Service Provider* assesses that the likelihood of a fault occurring within the dead zone is not greater than the likelihood of a fault occurring on *busbars*.

(m) For the purposes of this clause S5.1.9, a *credible contingency event* includes any event that clause S5.1.2.1 requires a *Network Service Provider* to consider as a *credible contingency event*.

(n) The provisions of clause S5.1.9(d) apply to *facilities* constructed or modified on or after the *performance standards commencement date*.

(o) For *facilities* other than those referred to in clause S5.1.9(n), the requirement for primary *protection system* redundancy must be derived by the *Network Service Provider* from the existing capability of each *facility* on the *performance standards commencement date*.

S5.1.10 Load and network control facilities

S5.1.10.1 General

Each *Network Service Provider* in consultation with *AEMO* must ensure that:

(a) sufficient *load* is under the control of underfrequency relays where required to ensure that in the event of the sudden, unplanned simultaneous occurrence of multiple *contingency events*, the *power system frequency* does not move outside the *extreme frequency excursion tolerance limits*;

(b) where determined to be necessary, sufficient *load* is under the control of undervoltage relays to minimize or reduce the risk of voltage collapse on the occurrence of multiple *contingency events*; and

(c) there is sufficient *load* under manual or automatic control either locally or from remotely located *control centres* to allow the *load shedding procedures* to be implemented on instruction from *AEMO* to enable *AEMO* to maintain *power system security*.

A *Network Service Provider* may require *load shedding* arrangements to be installed to cater for abnormal operating conditions.

Arrangements for *load shedding* must be agreed between *Transmission Network Service Providers* and *connected Distribution Network Service Providers* and may include the opening of circuits in either a *transmission* or *distribution network*.

The *Transmission Network Service Provider* must specify, in the *connection agreement,* control and monitoring requirements to be provided by a *Distribution Network Service Provider* for *load shedding facilities*.

S5.1.10.2 Distribution Network Service Providers

A *Distribution Network Service Provider* must:

(a) provide, install, operate and maintain *facilities* for *load shedding* in respect of any *connection point* at which the maximum *load* exceeds 10MW in accordance with clause 4.3.5 of the *Rules*;

(b) in accordance with the provisions of the relevant *connection agreement*, co-operate with the *Transmission Network Service Provider*s in conducting periodic functional testing of the *facilities*, which must not require *load* to be *disconnected*;

(c) apply underfrequency settings to relays as determined by *AEMO* in consultation with the *Network Service Provider*; and

(d) apply undervoltage settings to relays as notified by the *Transmission Network Service Provider* in accordance with clause S5.1.10.3(b).

S5.1.10.3 Transmission Network Service Providers

Transmission Network Service Providers must:

(a) conduct periodic functional tests of the *load shedding facilities*; and

(b) notify *Distribution Network Service Providers* regarding the settings of undervoltage *load* shed relays as determined by *AEMO* in consultation with the *Transmission Network Service Provider*.

S5.1.11 Automatic reclosure of transmission or distribution lines

Where *automatic reclose equipment* is provided on *transmission lines* or *distribution lines*, check or blocking *facilities* must be applied to the *automatic reclose equipment* in those circumstances where there is any possibility of the two ends of the *transmission line* or *distribution line* being *energised* from sources that are not in synchronism.

S5.1.12 Rating of transmission lines and equipment

For operational purposes each *Network Service Provider* must, on reasonable request, advise *AEMO* of the maximum current that may be permitted to flow (under conditions nominated by *AEMO*) through each *transmission line, distribution line* or other item of equipment that forms part of its *transmission system* or *distribution system*.

This maximum current is called a "*current rating*" of the *transmission line*, *distribution line* or item of equipment notwithstanding that it may be determined by equipment associated with its *connection* to the *power system* (including switchgear, droppers, current *transformers* and *protection systems*).

AEMO may request for a *transmission line*, *distribution line* or other item of equipment:

(a) a continuous *current rating*, being the level of current that is permitted to flow in that item of equipment for an indefinite period; and

(b) one or more short term *current ratings* for a period of time nominated by *AEMO* after consultation with the *Network Service Provider*, being the level of current that is permitted to flow in that item of equipment for that period of time if the current had been less than the corresponding continuous

current rating for a reasonable prior period taking into account the thermal properties of the item of equipment.

The *Network Service Provider* may be required by *AEMO* to advise different *current ratings* to be applied under nominated conditions including, without limitation:

(a) ambient weather conditions;

(b) seasons and/or times of *day*;

(c) ratios of the current during an emergency to the current prior to the emergency (taking into account pre-contingent loading history where applicable); and

(d) period of loading at the nominated level.

A *Transmission Network Service Provider* is entitled to advise *AEMO* of short term *current ratings* which may apply for nominated periods of time to the relevant *transmission line* or item of equipment provided that these ratings do not materially affect the safety of the *transmission line* or item of equipment, or the safety of persons. Short-term ratings for *transmission lines* or items of equipment may be implemented by a methodology or algorithm in a format agreed with *AEMO*.

S5.1.13 Information to be provided

A *Network Service Provider* must, in response to a *connection* enquiry or an *application to connect* made in accordance with clause 5.3.2 of the *Rules,* provide the *connection applicant* electrical design information relevant to the nominal point of *connection* in accordance with a relevant requirement of schedules 5.2, 5.3 or 5.3a.

Schedule 5.2 - Conditions for Connection of Generators

S5.2.1 Outline of requirements

(a) This schedule sets out details of additional requirements and conditions that *Generators* must satisfy as a condition of *connection* of a *generating system* to the *power system.*

(b) This schedule does not apply to any *generating system* that is:

(1) subject to an exemption from registration under clause 2.2.1(c); or

(2) eligible for exemption under any guidelines issued under clause 2.2.1(c),

and which is *connected* or intended for use in a manner the *Network Service Provider* considers is unlikely to cause a material degradation in the quality of *supply* to other *Network Users.*

(c) This schedule also sets out the requirements and conditions which subject to clause 5.2.5 of the *Rules*, are obligations on *Generators*:

(1) to co-operate with the relevant *Network Service Provider* on technical matters when making a new *connection*; and

(2) to provide information to the *Network Service Provider* or *AEMO.*

(d) The equipment associated with each *generating system* must be designed to withstand without damage the range of operating conditions which may arise consistent with the *system standards*.

(e) *Generators* must comply with the *performance standards* and any attached terms or conditions of agreement agreed with the *Network Service Provider* or *AEMO* in accordance with a relevant provision of schedules 5.1a or 5.1.

(f) This schedule does not set out arrangements by which a *Generator* may enter into an agreement or contract with *AEMO* to:

(1) provide additional services that are necessary to maintain *power system security*; or

(2) provide additional services to facilitate management of the *market*.

(g) This schedule provides for *automatic access standards* and the determination of *negotiated access standards* derived from *minimum access standards* which once determined, must be recorded together with the *automatic access standards* in a *connection agreement* and registered with *AEMO* as *performance standards*.

S5.2.2 Application of Settings

A *Generator* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.2 if the settings have been approved in writing by the relevant *Network Service Provider* and, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, also by *AEMO*. A *Generator* must not allow its *generating unit* to *supply* electricity to the *power system* without such prior approval.

If a *Generator* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that the changed setting would cause the *generating unit* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that a setting of a *generating unit's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *AEMO* (as applicable) must consult with the relevant *Generator*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide *AEMO* with a copy of its request to a *Generator* to apply a setting or to conduct a test.

A *Generator* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Generator* must, on request, provide both *AEMO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Generator* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Generator* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Generator* its reasonable costs of changing the setting and conducting the tests as requested.

S5.2.3 Technical matters to be coordinated

(a) A *Generator* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon relevant technical matters in respect of

each new or altered *connection* of a *generating system* to a *network* including:

(1) design at the *connection point*;

(2) physical layout adjacent to the *connection point*;

(3) primary protection and backup protection (clause S5.2.5);

(4) control characteristics (clause S5.2.5);

(5) communications *facilities* (clause S5.2.6);

(6) insulation co-ordination and lightning protection (paragraph (b));

(7) fault levels and fault clearance (clause S5.2.8);

(8) switching and *isolation* facilities (clause S5.2.8*)*;

(9) interlocking and *synchronising* arrangements; and

(10) *metering installation*s.

(b) A *Generator* must ensure that in designing a *generating system's* electrical *plant*, including any *substation* for the *connection* of the *generating system* to the *network*, to operate at the same *nominal voltage* as at the *connection point*:

(1) the *plant* complies with the relevant *Australian Standards* unless a provision of these *Rules* allows or requires otherwise;

(2) the earthing of the *plant* complies with the ENA EG1-2006: Substation Earthing Guide to reduce step and touch potentials to safe levels;

(3) the *plant* is capable of withstanding, without damage the *voltage* impulse levels specified in the *connection agreement*;

(4) the insulation levels of the *plant* are co-ordinated with the insulation levels of the *network* to which the *generating system* is *connected* as specified in the *connection agreement*; and

(5) safety provisions in respect of the *plant* comply with requirements applicable to the *participating jurisdiction* in which the *generating system* is located, as notified by the *Network Service Provider*.

(c) If no relevant *Australian Standard* exists for the purposes of paragraph (b)(1), the *Generator* must agree with the *Network Service Provider* for the *Generator* to comply with another relevant standard.

S5.2.4 Provision of information

(a) A *Generator* or person who is negotiating a *connection agreement* with a *Network Service Provider* must promptly on request by *AEMO* or the *Network Service Provider* provide all data in relation to that *generating system* specified in schedule 5.5.

(b) A *Generator*, or person required under the *Rules* to register as the *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, by the earlier of:

(1) the day on which an *application to connect* is made under clause 5.3.4(a);

(2) the day on which amendments to *performance standards* are submitted under rule 4.14(p) or clause 5.3.9(b);

(3) three months before commissioning of a *generating system* or planned alteration to a *generating system*; or

(4) 5 *business days* before commissioning of a *generating system* alteration that is repairing *plant* after a *plant* failure, if *plant* performance after the alteration will differ from performance prior to the *plant* failure,

must provide:

(5) to *AEMO* and the relevant *Network Service Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) the following information about the *control systems* of the *generating system*:

(i) a set of functional block diagrams, including all functions between feedback signals and *generating system* output;

(ii) the parameters of each functional block, including all settings, gains, time constants, delays, deadbands and limits; and

(iii) the characteristics of non-linear elements,

with sufficient detail for *AEMO* and *Network Service Providers* to perform load flow and dynamic simulation studies;

(6) to *AEMO*, model source code associated with the model in subparagraph (5) in an unencrypted form suitable for at least one of the software simulation products nominated by *AEMO* and in a form that would allow conversion for use with other software simulation products by *AEMO*;

(7) [**Deleted**]

(8) to *AEMO* and the relevant *Network Service Providers* (including the relevant *Transmission Network Service Provider* in respect of an *embedded generating unit*) a *releasable user guide.*

(c) The information provided under paragraph (b) must:

(1) encompass all *control systems* that respond to *voltage* or *frequency* disturbances on the *power system*, and which are either integral to the *generating units* or otherwise part of the *generating system*, including those applying to *reactive power* equipment that forms part of the *generating system;* and

(2) conform with the applicable models developed in accordance with the *Generating System Model Guidelines,* or an alternative model agreed with *AEMO* to be necessary to adequately represent the *generating plant* to carry out load flow and dynamic simulations.

(d) The *Generator* must provide to *AEMO* information that updates the information provided under clause S5.2.4(b) and must provide to the relevant *Network Service Providers* information that updates the information provided under clause S5.2.4(b)(5):

(1) within 3 months after commissioning tests or other tests undertaken in accordance with clause 5.7.3 are completed;

(2) when the *Generator* becomes aware that the information is incomplete, inaccurate or out of date; or

(3) on request by *AEMO* or the relevant *Network Service Provider*, where *AEMO* or the relevant *Network Service Provider* considers that the information in incomplete, inaccurate or out of date.

(d1) A *Generator* is only required to provide new information under clause S5.2.4(d) to the extent that it is different to the information previously provided under clause S5.2.4(b).

(e) For the purposes of clause S5.2.4(e1), a *Connection Applicant* must be registered as an *Intending Participant* in accordance with rule 2.7.

(e1) For the purposes of clause 5.3.2(f), the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of a proposed *connection* for a *generating system* includes:

(1) the highest expected single phase and three phase fault levels at the *connection point* with the *generating system* not *connected*;

(2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be *connected* into the existing *transmission system* or *distribution system*;

(3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* with the *generating system* not *connected*;

(4) technical information relevant to the *connection point* with the *generating system* not *synchronised* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion (for harmonics relevant to the *generating system*) and *voltage* unbalance; and

(5) information relating to the performance of the *national grid* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*, including:

(i) a model of the *power system*, including relevant *considered projects* and the range of expected operating conditions, sufficient to carry out load flow and dynamic simulations; and

(ii) information on *inter-regional* and *intra-regional power transfer capabilities* and relevant *plant* ratings.

(f) All information provided under this clause S5.2.4 must be treated as *confidential information*.

S5.2.5 Technical requirements

S5.2.5.1 Reactive power capability

Automatic access standard

(a) The *automatic access standard* is a *generating system* operating at:

(1) any level of *active power* output; and

(2) any *voltage* at the *connection point* within the limits established under clause S5.1a.4 without a *contingency event*,

must be capable of supplying and absorbing continuously at its *connection point* an amount of *reactive power* of at least the amount equal to the product of the *rated active power* of the *generating system* and 0.395.

Minimum access standard

(b) The *minimum access standard* is no capability is required to supply or absorb *reactive power* at the *connection point*.

Negotiated access standard

(c) When negotiating a *negotiated access standard*, the *Generator* and the *Network Service Provider*:

(1) must subject to any agreement under paragraph (d)(4), ensure that the *reactive power capability* of the *generating system* is sufficient to ensure that all relevant *system standards* are met before and after *credible contingency events* under normal and planned *outage* operating conditions of the *power system*, taking into account at least existing projects and *considered projects*;

(2) may negotiate either a range of *reactive power* absorption and supply, or a range of *power factor*, at the *connection point*, within which the *plant* must be operated; and

(3) may negotiate a limit that describes how the *reactive power capability* varies as a function of *active power* output due to a design characteristic of the *plant*.

(d) If the *generating system* is not capable of the level of performance established under paragraph (c)(1) the *Generator*, depending on what is reasonable in the circumstances, must:

(1) pay compensation to the *Network Service Provider* for the provision of the deficit of *reactive power* (supply and absorption) from within the *network*;

(2) install additional equipment *connecting* at the *generating system's connection point* or another location, to provide the deficit of *reactive power* (supply and absorption), and such equipment is deemed to be part of the *generating system*;

(3) reach a commercial arrangement with a *Registered Participant* to provide the deficit of *reactive power* (supply and absorption); or

(4) if the inability to meet the performance level only occurs for particular operating conditions, agree to and document as part of the proposed *negotiated access standard*, operational arrangements by which the *plant* can achieve an agreed level of performance for those operating conditions.

(e) The *Generator* may select one or more options referred to in paragraph (d).

General requirements

(f) An *access standard* must record the agreed value for *rated active power* and where relevant the method of determining the value.

(g) An *access standard* for consumption of *energy* by a *generating system* when not supplying or absorbing *reactive power* under an *ancillary services agreement* is to be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.5.2 Quality of electricity generated

(a) For the purpose of this clause S5.2.5.2 in respect of a *synchronous generating unit*, AS 1359.101 and IEC 60034-1 are *plant standards* for harmonic *voltage* distortion.

Automatic access standard

(b) The *automatic access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:

(1) *voltage* fluctuation greater than the limits allocated by the *Network Service Provider* under clause S5.1.5(a);

(2) harmonic *voltage* distortion greater than the emission limits specified by a *plant standard* under paragraph (a) or allocated by the *Network Service Provider* under clause S5.1.6(a); and

(3) *voltage* unbalance greater than the limits allocated by the *Network Service Provider* in accordance with clause S5.1.7(c).

Minimum access standard

(c) The *minimum access standard* is a *generating system* when generating and when not generating must not produce at any of its *connection points* for *generation*:

(1) *voltage* fluctuations greater than limits determined under clause S5.1.5(b);

(2) harmonic *voltage* distortion more than the lesser of the emission limits determined by the relevant *Network Service Provider* under clause S5.1.6(b) and specified by a *plant standard* under paragraph (a); and

(3) *voltage* unbalance more than limits determined under clause S5.1.7(c).

Negotiated access standard

(d) A *negotiated access standard* negotiated under this clause S5.2.5.2 must not prevent the *Network Service Provider* meeting the *system standards* or contractual obligations to existing *Network Users*.

S5.2.5.3 Generating unit response to frequency disturbances

(a) For the purposes of this clause S5.2.5.3:

normal operating frequency band, **operational frequency tolerance band**, or **extreme frequency excursion tolerance limits** are references to the widest range specified for those terms for any condition (including an "island" condition) in the *frequency operating standards* that apply to the *region* in which the *generating unit* is located.

stabilisation time and **recovery time** mean the longest times allowable for *system frequency* to remain outside the operational frequency tolerance band and the normal operating frequency band, respectively, for any condition (including an "island" condition) in the *frequency operating standards* that apply to the region in which the *generating unit* is located.

transient frequency limit and **transient frequency time** mean the values of 47.5 Hz and 9 seconds respectively, or such other values determined by the *Reliability Panel*.

Automatic access standard

(b) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:

(1) the lower bound of the extreme frequency excursion tolerance limits to the lower bound of the operational frequency tolerance band for at least the stabilisation time;

(2) the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band, for at least the recovery time including any time spent in the range under subparagraph (1);

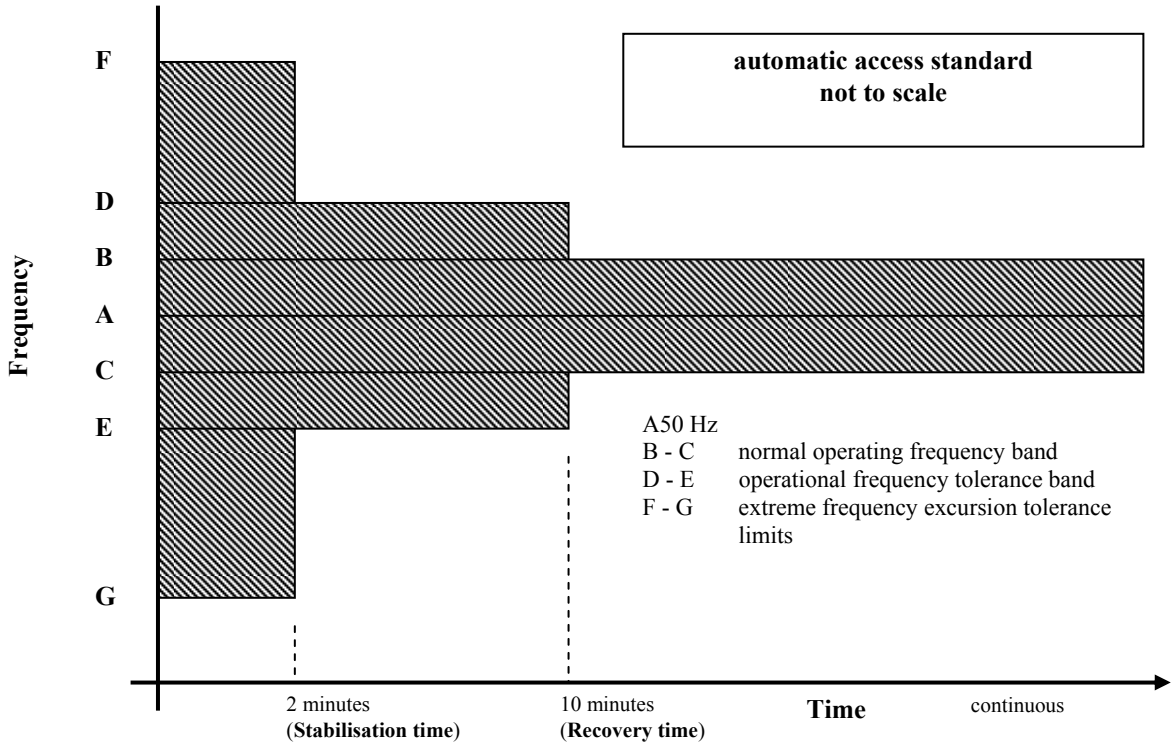
(3) the normal operating frequency band for an indefinite period;

(4) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band, for at least the recovery time including any time spent in the range under subparagraph (5); and

(5) the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits for at least the stabilisation time,

unless the rate of change of *frequency* is outside the range of –4 Hz to 4 Hz per second for more than 0.25 seconds or such other range as determined by the *Reliability Panel* from time to time.

N**ote:** The automatic access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (b), paragraph (b) prevails.



Minimum access standard

(c) The *minimum access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* for *frequencies* in the following ranges:

(1) the lower bound of the extreme frequency excursion tolerance limits to the transient frequency limit for at least the transient frequency time;

(2) the transient frequency limit to the lower bound of the operational frequency tolerance band for at least the stabilisation time;

(3) the lower bound of the operational frequency tolerance band to the lower bound of the normal operating frequency band for at least the recovery time including any time spent in the ranges under subparagraphs (1) and (2);

(4) the normal operating frequency band for an indefinite period;

(5) the upper bound of the normal operating frequency band to the upper bound of the operational frequency tolerance band for at least the recovery time including any time spent in the ranges under subparagraph (6) unless the *generating system* has a *protection system* to trip a *generating unit* if the *frequency* exceeds a level agreed with *AEMO*; and

(6) in respect of a *generating system*:

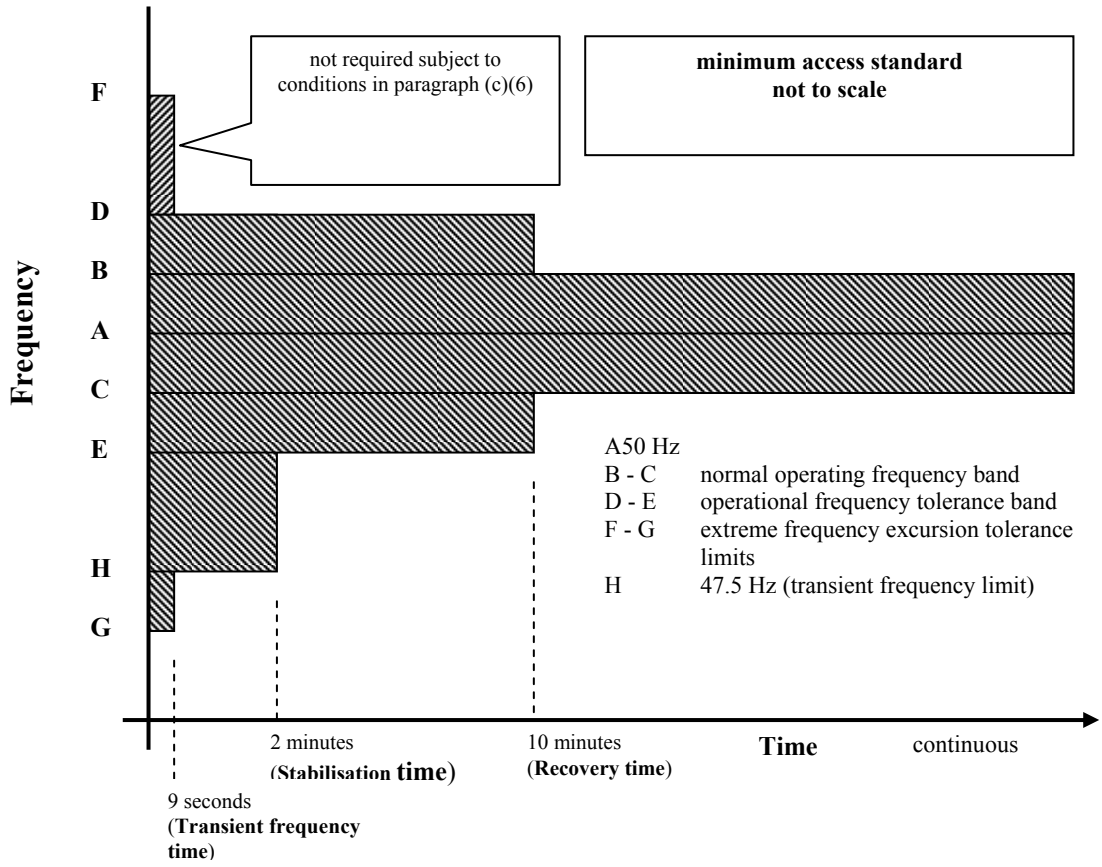
(i) of 30 MW or more; and

(ii) that does not have a *protection system* to trip the *generating unit* if the *frequency* exceeds a level agreed with *AEMO*,

the upper bound of the operational frequency tolerance band to the upper bound of the extreme frequency excursion tolerance limits (including an "island" condition) for at least the transient frequency time,

unless the rate of change of *frequency* is outside the range of -1 Hz to 1 Hz per second for more than one second or such other range as determined by the *Reliability Panel* from time to time.

Note: The minimum access standard is illustrated in the following diagram. To the extent of any inconsistency between the diagram and paragraph (c), paragraph (c) prevails.



Negotiated access standard

(d) A *negotiated access standard* can be accepted by the *Network Service Provider* provided that *AEMO* and the *Network Service Provider* agree that:

(1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;

(2) the *frequency* would be unlikely to fall below the lower bound of the operational frequency tolerance band as a result of over-frequency tripping of *generating units*; and

(3) there would be no material adverse impact on quality of *supply* to other *Network Users* or *power system security*.

(e) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.3.

S5.2.5.4 Generating system response to voltage disturbances

Automatic access standard

(a) The *automatic access standard* is a *generating system* and each of its *generating units* must be capable of *continuous uninterrupted operation* where a *power system* disturbance causes the *voltage* at the *connection point* to vary within the following ranges:

(1) *voltages* over 110% for the durations permitted under clause S5.1a.4;

(2) 90% to 110% of *normal voltage* continuously;

(3) 80% to 90% of *normal voltage* for a period of at least 10 seconds; and

(4) 70% to 80% of *normal voltage* for a period of at least 2 seconds.

Minimum access standard

(b) The *minimum access standard* is a *generating system* including all operating *generating units* must be capable of *continuous uninterrupted operation* where a *power system* disturbance causes the *voltage* at the *connection point* to vary in the range of 90% to 110% of *normal voltage*, provided that the ratio of *voltage* to *frequency* (as measured at the *connection point* and expressed as percentage of *normal voltage* and a percentage of 50 Hz) does not exceed:

(1) a value of 1.15 for more than two minutes; or

(2) a value of 1.10 for more than 10 minutes.

Negotiated access standard

(c) In negotiating a *negotiated access standard*, a *generating system* and each of its operating *generating units* must be capable of *continuous uninterrupted operation* for the range of *voltages* specified in the *automatic access standard* except where *AEMO* and the *Network Service Provider* agree that:

(1) the *negotiated access standard* is as close as practicable to the *automatic access standard* while respecting the need to protect the *plant* from damage;

(2) the *generating plant* that would be tripped as a result of any *voltage* excursion within levels specified by the *automatic access standard*, is not more than 100 MW or a greater limit based on what *AEMO* and the *Network Service Provider* both consider to be reasonable in the circumstances; and

(3) there would be no material adverse impact on the quality of *supply* to other *Network Users* or *power system security.*

(d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.4, *AEMO* and the *Network Service Provider* must at a minimum, take into account:

(1) the expected performance of existing *networks* and *considered projects*;

(2) the expected performance of existing *generating plant* and other relevant projects; and

(3) any corresponding *performance standard* (or where no *performance standard* has been registered, the *access standard*) that allows *generating plant* to trip for *voltage* excursions in ranges specified under the *automatic access standards*.

(e) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.4.

General requirement

(f) The *access standard* must include any operational arrangements necessary to ensure the *generating system* and each of its *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.5 Generating system response to disturbances following contingency events

(a) In this clause S5.2.5.5 a fault includes:

(1) a fault of the relevant type having a metallic conducting path; and

(2) a fault of the relevant type resulting from reclosure onto a fault by the operation of *automatic reclose equipment*.

Automatic access standard

(b) The *automatic access standard* is:

(1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for a disturbance caused by an event that is:

(i) a *credible contingency event* other than a fault referred to in subparagraph (iv);

(ii) a three phase fault in a *transmission system* cleared by all relevant primary *protection systems*;

(iii) a two phase to ground, phase to phase or phase to ground fault in a *transmission system* cleared in:

(A) the longest time expected to be taken for a relevant *breaker fail protection system* to clear the fault; or

(B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of the time specified in column 4 of Table S5.1a.2 (or if none is specified, 430 milliseconds) and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault; and

(iv) a three phase, two phase to ground, phase to phase or phase to ground fault in a *distribution network* cleared in:

(A) the longest time expected to be taken for the *breaker fail protection system* to clear the fault; or

(B) if a *protection system* referred to in subparagraph (A) is not installed, the greater of 430 milliseconds and the longest time expected to be taken for all relevant primary *protection systems* to clear the fault,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

(2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control, a *generating system* and each of its *generating units*, in respect of the types of fault described in subparagraphs (1)(ii) to (iv), must supply to or absorb from the *network*:

(i) to assist the maintenance of *power system voltages* during the application of the fault, capacitive reactive current of at least the greater of its pre-disturbance reactive current and 4% of the maximum continuous current of the *generating system* including all operating *generating units* (in the absence of a disturbance) for each 1% reduction (from its pre-fault level) of *connection point voltage* during the fault;

(ii) after *disconnection* of the faulted element, *reactive power* sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* under clause S5.2.5.4; and

(iii) from 100 milliseconds after *disconnection* of the faulted element, *active power* of at least 95% of the level existing just prior to the fault.

Minimum access standard

(c) The *minimum access standard* is:

(1) a *generating system* and each of its *generating units* must remain in *continuous uninterrupted operation* for the disturbance caused by an event that is:

(i) a *credible contingency event* other than a fault referred to in subparagraph (iii);

(ii) a single phase to ground, phase to phase or two phase to ground fault in a *transmission system* cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault unless *AEMO* and the *Network Service Provider* agree that:

(A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;

(B) there is unlikely to be an adverse impact on quality of *supply* to other *Network Users*; and

(C) there is unlikely to be a material adverse impact on *power system security*; and

(iii) a single phase to ground, phase to phase or two phase to ground fault in a *distribution network*, cleared in the longest time expected to be taken for all relevant primary *protection systems* to clear the fault, unless *AEMO* and the *Network Service Provide*r agree that:

(A) the total reduction of *generation* in the *power system* due to that fault would not exceed 100 MW;

(B) there is unlikely to be a material adverse impact on quality of *supply* to other *Network Users*; and

(C) there is unlikely to be a material adverse impact on *power system security*,

provided that the event is not one that would *disconnect* the *generating unit* from the *power system* by removing *network elements* from service; and

(2) subject to any changed *power system* conditions or energy source availability beyond the *Generator's* reasonable control after *disconnection* of the faulted *element*, each *generating system* must, in respect of the types of fault described in subparagraphs (1)(ii) and (iii), deliver to the *network*, *active power* and supply or absorb leading or lagging *reactive power*, sufficient to ensure that the *connection point voltage* is within the range for *continuous uninterrupted operation* agreed under clause S5.2.5.4.

Negotiated access standard

(d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.5, the *Network Service Provider* and *AEMO* must take into account, without limitation:

(1) the expected performance of:

(i) existing *networks* and *considered projects*;

(ii) existing *generating plant* and other relevant projects; and

(iii) *control systems* and *protection systems*, including auxiliary systems and *automatic reclose equipment*; and

(2) the expected range of *power system* operating conditions.

(e) A proposed *negotiated access standard* may be accepted if the *connection* of the *plant* at the proposed access level would not cause other generating *plant* or *loads* to trip as a result of an event, when they would otherwise not have tripped for the same event.

(f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.5.

General requirement

(g) The *access standard* must include any operational arrangements to ensure the *generating system* including all operating *generating units* will meet its agreed performance levels under abnormal *network* or *generating system* conditions.

S5.2.5.6 Quality of electricity generated and continuous uninterrupted operation

Minimum access standard

The *minimum access standard* is a *generating system* including each of its operating *generating units* and *reactive plant*, must not *disconnect* from the *power system* as a result of *voltage* fluctuation, harmonic *voltage* distortion and *voltage*

unbalance conditions at the *connection point* within the levels specified in clauses S5.1a.5, S5.1a.6 and S5.1a.7.

S5.2.5.7 Partial load rejection

(a) For the purposes of this clause S5.2.5.7 **minimum load** means minimum *sent out generation* for continuous stable operation.

(b) This clause S5.2.5.7 does not apply to an *asynchronous generating unit*.

Automatic access standard

(c) The *automatic access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 30% from its predisturbance level or equivalent impact from separation of part of the *power system* in less than 10 seconds, provided that the *loading level* remains above minimum load.

Minimum access standard

(d) The *minimum access standard* is a *generating unit* must be capable of *continuous uninterrupted operation* during and following a *power system load* reduction of 5% or equivalent impact from separation of part of the *power system* in less than 10 seconds provided that the *loading level* remains above minimum load.

Negotiated access standard

(e) If in accordance with clause 5.3.4A the *Generator* and the *Network Service Provider* determine a *negotiated access standard* is to apply, the *Network Service Provider* must consult *AEMO* to ensure that the *negotiated access standard* does not materially adversely affect *power system security*.

(f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.7.

General requirements

(g) The actual partial load rejection performance must be recorded in the *access standards*.

S5.2.5.8 Protection of generating systems from power system disturbances

Minimum access standard

(a) The *minimum access standard* is:

(1) subject to subparagraph (2) and paragraph (e), for a *generating system* or any of its *generating units* that is required by a *Generator* or *Network Service Provider* to be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power system*, the relevant *protection system* or *control system* must not *disconnect* the *generating system* for:

(i) conditions for which it must remain in *continuous uninterrupted operation*; or

(ii) conditions it must withstand under the *Rules*; and

(2) a *generating system* with a *nameplate rating* of 30MW or more, or *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, *connected* to a *transmission system* must have *facilities* to automatically and rapidly reduce its *generation*:

(i) by at least half, if the *frequency* at the *connection point* exceeds a level nominated by *AEMO* (not less than the upper limit of the *operational frequency tolerance band*) and the duration above this *frequency* exceeds a value nominated by *AEMO* where the reduction may be achieved:

(A) by reducing the output of the *generating system* within 3 seconds, and holding the output at the reduced level until the *frequency* returns to within the *normal operating frequency band*; or

(B) by disconnecting the *generating system* from the *power system* within 1 second; or

(ii) in proportion to the difference between the *frequency* at the *connection point* and a level nominated by *AEMO* (not less than the upper limit of the *operational frequency tolerance band*), such that the *generation* is reduced by at least half, within 3 seconds of the *frequency* reaching the upper limit of the *extreme frequency excursion tolerance limits*.

Negotiated access standard

(b) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.8.

General requirements

(c) *AEMO* or the *Network Service Provider* may require that an *access standard* include a requirement for the *generating system* to be automatically *disconnected* by a local or remote control scheme whenever the part of the

network to which it is *connected* has been *disconnected* from the *national grid*, forming an island that *supplies* a *Customer.*

(d) The *access standard* must include specification of conditions for which the *generating unit* or *generating system* must trip and must not trip.

(e) Notwithstanding clauses S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.7, a *generating system* may be automatically *disconnected* from the *power system* under any of the following conditions:

(1) in accordance with an *ancillary services agreement* between the *Generator* and *AEMO*;

(2) where a *load* that is not part of the *generating system* has the same *connection point* as the *generating system* and *AEMO* and the *Network Service Provider* agree that the *disconnection* would in effect be under-frequency *load shedding*;

(3) where the *generating system* is automatically *disconnected* under paragraph (a) or clause S5.2.5.9;

(4) where the *generating system* is automatically *disconnected* under clause S5.2.5.10 due to a failure of the *generating plant*; or

(5) in accordance with an agreement between the *Generator* and a *Network Service Provider* (including an agreement in relation to an emergency control scheme under clause S5.1.8) to provide a service that *AEMO* agrees is necessary to maintain or restore *power system security* in the event of a specified *contingency event*.

(f) The *Network Service Provider* is not liable for any loss or damage incurred by the *Generator* or any other person as a consequence of a fault on either the *power system*, or within the *Generator*'s *facility*.

S5.2.5.9 Protection systems that impact on power system security

Automatic access standard

(a) The *automatic access standard* is:

(1) subject to clauses S5.1.9(k) and S5.1.9(l), primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element in a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1);

(2) each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected*

from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications *facility* upon which that *protection system* depends) out of service; and

(3) *breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).

(b) In relation to an *automatic access standard* under this clause S5.2.5.9, the *Generator* must provide redundancy in the primary *protection systems* under paragraph (a)(2) and provide *breaker fail protection systems* under paragraph (a)(3) if *AEMO* or the *Network Service Provider* consider that a lack of these *facilities* could result in:

(1) a material adverse impact on *power system security* or quality of *supply* to other *Network Users*; or

(2) a reduction in *inter-regional* or *intra-regional power transfer capability*,

through any mechanism including:

(3) consequential tripping of, or damage to, other *network* equipment or *facilities* of other *Network Users*, that would have a *power system security* impact; or

(4) instability that would not be detected by other *protection systems* in the *network*.

Minimum access standard

(c) The *minimum access standard* is:

(1) subject to clauses S5.1.9(k) and S5.1.9(l), *protection systems* must be provided to *disconnect* from the *power system* any faulted element within a *generating system* and in protection zones that include the *connection point* within the applicable *fault clearance time* determined under clause S5.1.9(a)(2); and

(2) if a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

Negotiated access standard

(d) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.9.

General requirements

(e) The *Network Service Provider* and the *Generator* must cooperate in the design and implementation of *protection systems* to comply with this clause S5.2.5.9, including cooperation on:

(1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;

(2) tripping of one party's circuit breakers by a *protection system* of the other party; and

(3) co-ordination of *protection system* settings to ensure inter-operation.

(f) The *protection system* design referred to in paragraphs (a) and (c) must:

(1) be coordinated with other *protection systems*;

(2) avoid consequential *disconnection* of other *Network Users' facilities*; and

(3) take into account existing obligations of the *Network Service Provider* under *connection agreements* with other *Network Users.*

S5.2.5.10 Protection to trip plant for unstable operation

Automatic access standard

(a) The *automatic access standard* is:

(1) a *synchronous generating unit* must have a *protection system* to *disconnect* it promptly when a condition that would lead to pole slipping is detected in order to prevent pole slipping or other conditions where a *generating unit* causes *active power*, *reactive power* or *voltage* at the *connection point* to become unstable as assessed in accordance with the *power system* stability guidelines established under clause 4.3.4(h); and

(2) an *asynchronous generating unit* must have a *protection system* to *disconnect* it promptly for conditions where the *active power*, *reactive power* or *voltage* at the *connection point* becomes unstable as assessed in accordance with the guidelines for *power system* stability established under clause 4.3.4(h).

Minimum access standard

(b) The *minimum access standard* is a *generating unit* must not cause a *voltage* disturbance at the *connection point* due to sustained unstable behaviour of more than the maximum level specified in Table 7 of *Australian Standard* AS/NZS 61000.3.7:2001.

Negotiated access standard

(c) If the *Network Service Provider* and the *Generator* agree, a *protection system* may also trip any other part of the *generating system* in order to cease the instability.

(d) Notwithstanding paragraph (c), a *protection system* must be provided in the *access standard* to trip the affected *generating unit* where:

(1) the *Network Service Provider* considers it necessary to prevent consequential tripping of, or damage to, other *generating units*, *network* equipment or other *Network Users' facilities,* or

(2) *AEMO* considers it necessary to prevent unstable operation having an adverse impact on *power system security*.

(e) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.10

S5.2.5.11 Frequency control

(a) For the purpose of this clause S5.2.5.11:

maximum operating level means in relation to:

(1) a *non-scheduled generating unit*, the maximum *sent out generation* consistent with its *nameplate rating*;

(2) a *scheduled generating unit* or *semi-scheduled generating unit*, the maximum *sent out generation* (but not emergency *generation)* consistent with its *registered bid and offer data*;

(3) a *non-scheduled generating system*, the combined maximum *sent out generation* consistent with the *nameplate ratings* of its in-service *generating units*; and

(4) a *scheduled generating system* or *semi-scheduled generating system*, the combined maximum *sent out generation* (but not emergency *generation*) of its in-service *generating units*, consistent with its *registered bid and offer data*.

minimum operating level means in relation to:

(1) a *non-scheduled generating unit*, its minimum *sent out generation* for continuous stable operation;

(2) a *scheduled generating unit* or *semi-scheduled generating unit*, its minimum *sent out generation* for continuous stable operation consistent with its *registered bid and offer data*;

(3) a *non-scheduled generating system*, the combined *minimum operating level* of its in-service *generating units*; and

(4) a *scheduled generating system* or *semi-scheduled generating system*, the combined minimum *sent out generation* of its in-service *generating units*, consistent with its *registered bid and offer data*.

pre-disturbance level means in relation to a *generating unit* and a *frequency* disturbance, the *generating unit's* level of output just before the *system frequency* first exceeds the upper or lower limit of the *normal operating frequency band* during the *frequency* disturbance.

system frequency means the *frequency* of the *transmission system* or *distribution system* to which the *generating unit* or *generating system* is *connected*.

Automatic access standard

(b) The *automatic access standard* is:

(1) a *generating system's active power* transfer to the *power system* must not:

(i) increase in response to a rise in system frequency; or

(ii) decrease in response to a fall in system frequency;

(2) a *generating system* must be capable of automatically reducing its *active power* transfer to the *power system*:

(i) whenever the system frequency exceeds the upper limit of the *normal operating frequency band*;

(ii) by an amount that equals or exceeds the least of:

(A) 20% of its maximum operating level times the *frequency* difference between system frequency and the upper limit of the *normal operating frequency band*;

(B) 10% of its maximum operating level; and

(C) the difference between the *generating unit's* pre-disturbance level and minimum operating level, but zero if the difference is negative; and

(iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of lower services to the *spot market* for *market ancillary services*; and

(3) a *generating system* must be capable of automatically increasing its *active power* transfer to the *power system*:

(i) whenever the system frequency falls below the lower limit of the *normal operating frequency band*;

(ii) by the amount that equals or exceeds the least of:

(A) 20% of its maximum operating level times the percentage *frequency* difference between the lower limit of the *normal operating frequency band* and system frequency;

(B) 5% of its maximum operating level; and

(C) one third of the difference between the *generating unit's* maximum operating level and pre-disturbance level, but zero if the difference is negative; and

(iii) sufficiently rapidly for the *Generator* to be in a position to offer measurable amounts of raise services to the *spot market* for *market ancillary services*.

Minimum access standard

(c) The *minimum access standard* is a *generating system* under relatively stable input energy, *active power* transfer to the *power system* must not:

(1) increase in response to a rise in system frequency; and

(2) decrease more than 2% per Hz in response to a fall in system frequency.

Negotiated access standard

(d) A *Generator* proposing a *negotiated access standard* in respect of paragraph (c)(2) must demonstrate to *AEMO* that the proposed increase and decrease in *active power* transfer to the *power system* are as close as practicable to the *automatic access standard* for that *plant*.

(e) The *negotiated access standard* must record the agreed values for maximum operating level and minimum operating level, and where relevant the

method of determining the values and the values for a *generating system* must take into account its in-service *generating units*.

(f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.11.

General requirements

(g) Each *control system* used to satisfy this clause S5.2.5.11 must be *adequately damped*.

(h) The amount of a relevant *market ancillary service* for which the *plant* may be registered must not exceed the amount that would be consistent with the *performance standard* registered in respect of this requirement.

S5.2.5.12 Impact on network capability

Automatic access standard

(a) The *automatic access standard* is a *generating system* must have *plant* capabilities and *control systems* that are sufficient so that when *connected* it does not reduce any *inter-regional* or *intra-regional power transfer capability* below the level that would apply if the *generating system* were not *connected*.

Minimum access standard

(b) The *minimum access standard* is a *generating system* must have *plant* capabilities, *control systems* and operational arrangements sufficient to ensure there is no reduction in:

(1) the ability to *supply Customer load* as a result of a reduction in *power transfer capability*; and

(2) *power transfer capabilities* into a region by more than the combined *sent out generation* of its *generating units*.

Negotiated access standard

(c) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.5.12, the *Network Service Provider* and *AEMO* must take into account:

(1) the expected performance of:

(i) existing *networks* and *considered projects*;

(ii) existing *generating plant* and other relevant projects; and

(iii) *control systems* and *protection systems*, including *automatic reclose equipment*; and

(2) the expected range of *power system* operating conditions.

(d) The *negotiated access standard* must include:

(1) *control systems* to minimise any reduction in *power transfer capabilities*; and

(2) operational arrangements, including curtailment of the *generating system's* output if necessary to ensure that the *generating plant* is operated in a way that meets at least the *minimum access standard* under abnormal *network* and *generating system* conditions, so that *power system security* can be maintained.

(e) A *negotiated access standard* under this clause S5.2.5.12 must detail the *plant* capabilities, *control systems* and operational arrangements that will be maintained by the *Generator*, notwithstanding that change to the *power system*, but not changes to the *generating system,* may reduce the efficacy of the *plant* capabilities, *control systems* and operational arrangements over time.

(f) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.12.

General requirement

(g) If a *Network Service Provider* considers that *power transfer capabilities* of its *network* would be increased through provision of additional *control system facilities* to a *generating system* (such as a *power system* stabiliser), the *Network Service Provider* and the *Generator* may negotiate for the provision of such additional *control system facilities* as a commercial arrangement.

S5.2.5.13 Voltage and reactive power control

(a) For the purpose of this clause S5.2.5.13:

rise time means in relation to a step response test or simulation of a *control system*, the time taken for an output quantity to rise from 10% to 90% of the maximum change induced in that quantity by a step change of an input quantity.

settling time means in relation to a step response test or simulation of a *control system*, the time measured from initiation of a step change in an input quantity to the time when the magnitude of error between the output quantity and its final settling value remains less than 10% of:

(1) if the sustained change in the quantity is less than half of the maximum change in that output quantity, the maximum change induced in that output quantity; or

(2) the sustained change induced in that output quantity.

static excitation system means in relation to a *synchronous generating unit*, an *excitation control system* that does not use rotating machinery to produce the field current.

Automatic access standard

(b) The *automatic access standard* is:

(1) a *generating system* must have *plant* capabilities and *control systems* sufficient to ensure that:

(i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;

(ii) operation of the *generating system* does not degrade the damping of any critical mode of oscillation of the *power system*; and

(iii) operation of the *generating system* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;

(2) a *control system* must have:

(i) for the purposes of disturbance monitoring and testing, permanently installed and operational, monitoring and recording *facilities* for key variables including each input and output; and

(ii) *facilities* for testing the *control system* sufficient to establish its dynamic operational characteristics;

(3) a *synchronous generating system* must have an *excitation control system* that:

(i) regulates *voltage* at the *connection point* or another agreed location in the *power system* (including within the *generating system*) to within 0.5% of the setpoint;

(ii) is able to operate the stator continuously at 105% of *nominal voltage* with *rated active power* output;

(iii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clause S5.1a.3 and S5.1a.4;

(iv) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or the agreed location, without reliance on a *tap-changing transformer*;

(v) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;

(vi) has an excitation ceiling *voltage* of at least:

(A) for a static excitation system, 2.3 times; or

(B) for other *excitation control systems*, 1.5 times,

the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;

(vii) has *settling times* for a step change of *voltage* setpoint or *voltage* at the location agreed under subparagraph (i) of:

(A) generated *voltage* less than 2.5 seconds for a 5% *voltage* disturbance with the *generating unit* not *synchronised*;

(B) *active power*, *reactive power* and *voltage* less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit synchronised*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and

(C) in respect of each limiting device, *active power*, *reactive power* and *voltage* less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit synchronised*, when operating into a limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;

(viii) is able to increase field *voltage* from rated field *voltage* to the excitation ceiling *voltage* in less than:

(A) 0.05 second for a static excitation system; or

(B) 0.5 second for other *excitation control systems*;

(ix) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and

(x) has reactive current compensation settable for boost or droop; and

(4) a *generating system,* other than one comprised of *synchronous generating units*, must have a *voltage control system* that:

(i) regulates *voltage* at the *connection point* or an agreed location in the *power system* (including within the *generating system*) to within 0.5% of its setpoint;

(ii) regulates *voltage* in a manner that helps to support *network voltages* during faults and does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4;

(iii) allows the *voltage* setpoint to be continuously controllable in the range of at least 95% to 105% of *normal voltage* at the *connection point* or agreed location in the *power system,* without reliance on a *tap changing transformer*;

(iv) has limiting devices to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability;

(v) with the *generating system connected* to the *power system*, has *settling times* for *active power*, *reactive power* and *voltage* due to a step change of *voltage* setpoint or *voltage* at the location agreed under clause subparagraph (i), of less than:

(A) 5.0 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, from an operating point where the *voltage* disturbance would not cause any limiting device to operate; and

(B) 7.5 seconds for a 5% *voltage* disturbance with the *generating system connected* to the *power system*, when operating into any limiting device from an operating point where a *voltage* disturbance of 2.5% would just cause the limiting device to operate;

(vi) has *reactive power* rise time, for a 5% step change in the *voltage* setpoint, of less than 2 seconds;

(vii) has a *power system* stabiliser with sufficient flexibility to enable damping performance to be maximised, with characteristics as described in paragraph (c); and

(viii) has reactive current compensation.

(c) A *power system* stabiliser provided under paragraph (b) must have:

(1) for a *synchronous generating unit*, measurements of rotor speed and *active power* output of the *generating unit* as inputs, and otherwise, measurements of *power system frequency* and *active power* output of the *generating unit* as inputs;

(2) two washout filters for each input, with ability to bypass one of them if necessary;

(3) sufficient (and not less than two) lead-lag transfer function blocks (or equivalent number of complex poles and zeros) with adjustable gain and time-constants, to compensate fully for the phase lags due to the *generating plant*;

(4) an output limiter, which for a *synchronous generating unit* is continually adjustable over the range of –10% to +10% of stator *voltage*;

(5) monitoring and recording *facilities* for key variables including inputs, output and the inputs to the lead-lag transfer function blocks; and

(6) *facilities* to permit testing of the *power system* stabiliser in isolation from the *power system* by injection of test signals, sufficient to establish the transfer function of the *power system* stabiliser.

Minimum access standard

(d) The *minimum access standard* is:

(1) a *generating system* must have *plant* capabilities and *control systems*, including, if appropriate, a *power system* stabiliser, sufficient to ensure that:

(i) *power system* oscillations, for the frequencies of oscillation of the *generating unit* against any other *generating unit*, are *adequately damped*;

(ii) operation of the *generating unit* does not degrade:

(A) any mode of oscillation that is within 0.3 nepers per second of being unstable, by more than 0.01 nepers per second; and

(B) any other mode of oscillation to within 0.29 nepers per second of being unstable; and

(iii) operation of the *generating unit* does not cause instability (including hunting of *tap-changing transformer control systems*) that would adversely impact other *Registered Participants*;

(2) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have *facilities* for testing its *control systems* sufficient to establish their dynamic operational characteristics;

(3) a *generating unit* or *generating system* must have *facilities*:

(i) where the *connection point nominal voltage* is 100 kV or more, to regulate *voltage* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4; or

(ii) where the *connection point nominal voltage* is less than 100 kV, to regulate *voltage* or *reactive power* or *power factor* in a manner that does not prevent the *Network Service Provider* from achieving the requirements of clauses S5.1a.3 and S5.1a.4,

and sufficient to achieve the performance agreed in respect of clauses S5.2.5.1, S5.2.5.2, S5.2.5.3, S5.2.5.4, S5.2.5.5, S5.2.5.6 and S5.2.5.12;

(4) a *synchronous generating unit*, that is part of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must have an *excitation control system* that:

(i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and *AEMO*;

(ii) has excitation ceiling *voltage* of at least 1.5 times the excitation required to achieve *generation* at the *nameplate rating* for rated *power factor*, rated speed and *nominal voltage*;

(iii) subject to co-ordination under paragraph (i), has a *settling time* of less than 5.0 seconds for a 5% *voltage* disturbance with the *generating unit* synchronised, from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and

(iv) has over and under excitation limiting devices sufficient to ensure that a *voltage* disturbance does not cause the *generating unit* to trip at the limits of its operating capability; and

(5) a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more and which are *asynchronous generating units*, must have a *control system* that:

(i) regulates *voltage*, *power factor* or *reactive power* as agreed with the *Network Service Provider* and *AEMO*;

(ii) subject to co-ordination under subparagraph (i), has a settling time less than 7.5 seconds for a 5% *voltage* disturbance with the *generating unit* electrically connected to the *power system* from an operating point where such a *voltage* disturbance would not cause any limiting device to operate; and

(iii) has limiting devices to ensure that a *voltage* disturbance would not cause the *generating unit* to trip at the limits of its operating capability.

Negotiated access standard

(e) If a *generating system* cannot meet the *automatic access standard*, the *Generator* must demonstrate to the *Network Service Provider* why that standard could not be reasonably achieved and propose a *negotiated access standard*.

(f) The *negotiated access standard* proposed by the *Generator* under paragraph (e) must be the highest level that the *generating system* can reasonably achieve, including by installation of additional dynamic *reactive power* equipment, and through optimising its *control systems*.

(g) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.13.

General requirements

(h) A limiting device provided under paragraphs (b) and (c) must:

(1) not detract from the performance of any *power system* stabiliser; and

(2) be co-ordinated with all *protection systems*.

(i) The *Network Service Provider* may require that the design and operation of the *control systems* of a *generating unit* or *generating system* be coordinated with the existing *voltage control systems* of the *Network Service Provider* and of other *Network Users*, in order to avoid or manage interactions that would adversely impact on the *Network Service Provider* and other *Network Users*.

(j) Any requirements imposed by the *Network Service Provider* under paragraph (i) must be recorded in the *access standard*.

(k) The assessment of impact of the *generating units* on *power system* stability and damping of *power system* oscillations shall be in accordance with the guidelines for *power system* stability established under clause 4.3.4(h).

S5.2.5.14 Active power control

(a) The *automatic access standard* is a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:

(1) for a *scheduled generating unit* or a *scheduled generating system*:

(i) maintaining and changing its *active power* output in accordance with its *dispatch instructions*; and

(ii) ramping its *active power* output linearly from one level of *dispatch* to another;

(2) subject to energy source availability, for a *non-scheduled generating unit* or *non-scheduled generating system*:

(i) automatically reducing or increasing its *active power* output within 5 minutes, at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*, subject to subparagraph (iii);

(ii) automatically limiting its *active power* output, to below the level specified in subparagraph (i); and

(iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and

(3) subject to energy source availability, for a *semi-scheduled generating unit* or a *semi-scheduled generating system*:

(i) automatically reducing or increasing its *active power* output within 5 minutes at a constant rate, to or below the level specified in an instruction electronically issued by a *control centre*;

(ii) automatically limiting its *active power* output, to or below the level specified in subparagraph (i);

(iii) not changing its *active power* output within 5 minutes by more than the raise and lower amounts specified in an instruction electronically issued by a *control centre*; and

(iv) ramping its *active power* output linearly from one level of *dispatch* to another.

Minimum access standard

(b) The *minimum access standard* is a *generating system* comprised of *generating unit*s with a combined *nameplate rating* of 30 MW or more must have an *active power control system* capable of:

(1) for a *scheduled generating unit* or a *scheduled generating system,* maintaining and changing its *active power* output in accordance with its *dispatch instructions*;

(2) for a *non-scheduled generating system*:

(i) reducing its *active power* output, within 5 minutes, to or below the level required to manage *network* flows that is specified in a verbal instruction issued by the *control centre*;

(ii) limiting its *active power* output, to or below the level specified in subparagraph (i);

(iii) subject to energy source availability, ensuring that the change of *active power* output in a 5 minute period does not exceed a value specified in a verbal instruction issued by the *control centre*; and

(iv) being upgraded to receive electronic instructions from the *control centre* and fully implement them within 5 minutes; and

(3) for a *semi-scheduled generating unit* or a *semi-scheduled generating system*, maintaining and changing its *active power* output in accordance with its *dispatch instructions*.

Negotiated access standard

(c) A *negotiated access standard* may provide that if the number or frequency of verbal instructions becomes difficult for a *control centre* to manage, *AEMO* may require the *Generator* to upgrade its *facilities* to receive electronic instructions and fully implement them within 5 minutes.

(d) The *negotiated access standard* must document to *AEMO's* satisfaction any operational arrangements necessary to manage *network* flows that may include a requirement for the *generating system* to be operated in a manner that prevents its output changing within 5 minutes by more than an amount specified by a *control centre*.

(e) *AEMO* must advise on matters relating to *negotiated access standards* under this clause S5.2.5.14.

General requirements

(f) Each *control system* used to satisfy the requirements of paragraphs (a) and (b) must be *adequately damped*.

S5.2.6 Monitoring and control requirements

S5.2.6.1 Remote Monitoring

Automatic access standard

(a) The *automatic access standard* is a:

(1) *scheduled generating unit;*

(2) *scheduled generating system*;

(3) *non-scheduled generating unit* with a *nameplate rating* of 30 MW or more;

(4) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;

(5) *semi-scheduled generating unit*; or

(6) *semi-scheduled generating system*,

must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time in accordance with rule 4.11 the quantities that *AEMO* reasonably requires to discharge its *market* and *power system security* functions set out in Chapters 3 and 4.

(b) The quantities referred to under paragraph (a) that *AEMO* may request include:

(1) in respect of a *generating unit* with a *nameplate rating* of 30 MW or more:

(i) current, *voltage*, *active power* and *reactive power* in respect of *generating unit* stators or power conversion systems (as applicable);

(ii) the status of all switching devices that carry the *generation*; and

(iii) *tap-changing transformer* tap position;

(2) in respect of a *generating system* that includes a *generating unit* with a *nameplate rating* of less than 30 MW:

(i) its connected status, *tap-changing transformer* tap position and *voltages*;

(ii) *active power* and *reactive power* aggregated for groups of identical *generating units*;

(iii) either the number of identical *generating units* operating or the operating status of each non-identical *generating unit*; and

(iv) *active power* and *reactive power* for the *generating system;*

(3) in respect of an auxiliary supply system with a capacity of 30 MW or more associated with a *generating unit* or *generating system*, *active power* and *reactive power*;

(4) in respect of *reactive power* equipment that is part of a *generating system* but not part of a particular *generating unit*, its *reactive power*;

(5) in respect of a wind farm type of *generating system*:

(i) wind speed;

(ii) wind direction;

(iii) ambient temperature; and

(6) any other quantity that *AEMO* reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4.

Minimum access standard

(c) The *minimum access standard* is a:

(1) *scheduled generating unit*;

(2) *scheduled generating system*;

(3) *non-scheduled generating system* with a combined *nameplate rating* of 30 MW or more;

(4) *semi-scheduled generating unit*; or

(5) *semi-scheduled generating system*,

must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time:

(6) the *active power* output of the *generating unit* or *generating system* (as applicable);

(7) if *connected* to a *transmission system*, the *reactive power* output of the *generating unit* or *generating system* (as applicable); and

(8) if a wind farm type of *generating system*:

(i) number of units operating;

(ii) wind speed; and

(iii) wind direction,

in accordance with rule 4.11.

Negotiated access standard

(d) *AEMO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.1.

S5.2.6.2 Communications equipment

Automatic access standard

(a) The *automatic access standard* is a *Generator* must:

(1) provide and maintain two separate telephone *facilities* using independent telecommunications service providers, for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *AEMO's control centre*; and

(2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 3 hours following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Minimum access standard

(b) The *minimum access standard* is a *Generator* must:

(1) provide and maintain a telephone facility for the purposes of operational communications between the *Generator's* responsible operator under clause 4.11.3(a) and *AEMO's control centre*; and

(2) provide electricity supplies for *remote monitoring equipment* and *remote control equipment* installed in relation to its *generating system* capable of keeping such equipment available for at least 1 hour following total loss of *supply* at the *connection point* for the relevant *generating unit*.

Negotiated access standard

(c) A *negotiated access standard* must include, where the *Network Service Provider* or *AEMO* reasonably require, a back-up telephone facility be independent of commercial telephone service providers, and the *Network Service Provider* must provide and maintain the separate facility on a cost-recovery basis only through the charge for *connection*.

(d) A *negotiated access standard* must include that a *Generator* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed for each of its g*enerating systems* as appropriate, to a communications interface in a location reasonably acceptable to the *Network Service Provider* at the relevant *generation* facility.

(e) Communications systems between the communications interface under paragraph (d) and the *control centre* must be the responsibility of the *Network Service Provider* unless otherwise agreed by the *Generator* and the *Network Service Provider*.

(f) A *negotiated access standard* must include that the *Generator* provide accommodation and secure power supplies for communications *facilities* provided by the *Network Service Provider* under this clause S5.2.6.2.

(g) *AEMO* may advise on matters relating to *negotiated access standards* under this clause S5.2.6.2.

S5.2.7 Power station auxiliary supplies

In cases where a *generating system* takes its auxiliary supplies via a *connection point* through which its *generation* is not transferred to the *network*, the *access standards* must be established under clause S5.3.5 as if the *Generator* were a *Market Customer*.

S5.2.8 Fault current

Automatic access standard

(a) The *automatic access standard* is:

(1) the contribution of the *generating system* to the fault current on the *connecting network* through its *connection point* must not exceed the contribution level that will ensure that the total fault current can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified for the relevant *connection point* by the *Network Service Provider*;

(2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the higher of:

(i) the level specified in clause S5.2.4(e1)(1) ; and

(ii) the highest level of current at the *connection point* that can be safely interrupted by the circuit breakers of the *connecting network* and safely carried by the *connecting network* for the duration of the applicable *breaker fail protection system fault clearance times*, as specified by the *Network Service Provider*; and

(3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Minimum access standard

(b) The *minimum access standard* is:

(1) the *generating system* does not need to limit fault current contribution;

(2) a *generating system's connected plant* must be capable of withstanding fault current through the *connection point* up to the level specified in clause S5.2.4(e1)(1) ; and

(3) a circuit breaker provided to isolate a *generating unit* or *generating system* from the *network* must be capable of breaking, without damage or restrike, the maximum fault currents that could reasonably be expected to flow through the circuit breaker for any fault in the *network* or in the *generating unit* or *generating system*, as specified in the *connection agreement*.

Negotiated access standard

(c) In negotiating a *negotiated access standard*, the *Network Service Provider* must consider alternative *network* configurations in the determination of the applicable fault current level and must prefer those options that maintain an equivalent level of service to other *Network Users* and which, in the opinion of the *Generator*, impose the least obligation on the *Generator*.

(d) In carrying out assessments of proposed *negotiated access standards* under this clause S5.2.8, the *Network Service Provider* must take into account, without limitation:

(1) the expected performance of existing *networks* and *considered projects*;

(2) the expected performance of existing *generating plant* and other relevant projects; and

(3) the expected range of *power system* operating conditions.

Schedule 5.3 - Conditions for Connection of Customers

S5.3.1a Introduction to the schedule

(a) This schedule applies to the following classes of *Network User*:

(1) a *First-Tier Customer* in respect of its *first-tier load*;

(2) a *Second-Tier Customer* in respect of its *second-tier load*;

(3) a *Market Customer* in respect of its *market load*;

(4) a *Non-Registered Customer* in respect of *supply* it takes from a *network*; and

(5) a *Distribution Network Service Provider* in respect of its *distribution network.*

(b) For the purposes of this schedule 5.3 the term "*Network Service Provider"* must be interpreted to mean the *Network Service Provider* with whom the *Connection Applicant* has sought, or is seeking, a *connection* in accordance with clause 5.3.2 of the *Rules*.

(c) All *Network Users* must comply with the requirements for the establishment of *performance standards* in accordance with provisions contained in schedule 5.1a for *system standards* or schedule 5.1 for *Network Service Providers* and this schedule 5.3 for *Customers*.

(d) If the *Connection Applicant* is a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* may include as terms and conditions of the *connection agreement* any provision of this schedule that is expressed as an obligation on a *Network User*. If the *Connection Applicant* is not a *Registered Participant* in relation to the proposed *connection*, the *Network Service Provider* must include as terms and conditions of the *connection agreement*:

(1) each provision of this schedule that is expressed as an obligation on a *Network User*; and

(2) each agreed *performance standard* and an obligation to comply with it.

(e) The purpose of this schedule is to:

(1) describe the information that must be exchanged for the *connection* enquiry and *application to connect* processes described in rule 5.3 of the *Rules*;

(2) establish the *automatic access standards* and *minimum access standards* that will apply to the process of negotiating access standards under clause 5.3.4A of the *Rules*; and

(3) establish obligations to apply prudent design standards for the *plant* to be *connected.*

S5.3.1 Information

(a) Before a *Network User connects* any new or additional equipment to a *network*, the *Network User* must submit the following kinds of information to the *Network Service Provider*:

(1) a single line diagram with the protection details;

(2) *metering system* design details for any metering equipment being provided by the *Network User*;

(3) a general arrangement locating all the equipment on the site;

(4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;

(5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;

(6) earthing details;

(7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;

(8) *plant* and earth grid test certificates from approved test authorities;

(9) a secondary injection and trip test certificate on all circuit breakers;

(10) certification that all new equipment has been inspected before being *connected* to the *supply*; and

(11) operational arrangements.

(b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection Applicant* in respect of the proposed *connection* includes:

(1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;

(2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;

(3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;

(4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and

(5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3.1.(b).

S5.3.2 Design standards

A *Network User* must ensure that:

(a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;

(b) circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and

(c) new equipment including circuit breakers provided to isolate the *Network User's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power *frequency voltage*s and impulse levels nominated by the *Network Service Provider* to apply at the *connection point* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3.3 Protection systems and settings

A *Network User* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

(a) The *automatic access standard* is:

(1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).

(2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.

(3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).

(b) The *minimum access standard* is:

(1) Primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).

(2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

(c) The *Network Service Provider* and the *Network User* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:

(1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;

(2) tripping of one party's circuit breakers by a *protection system* of the other party; and

(3) co-ordination of *protection system* settings to ensure inter-operation.

Before the *Network User's* installation is *connected* to the *Network Service Provider's transmission or distribution system* the *Network User's protection system* must be tested and the *Network User* must submit the appropriate test certificate to the *Network Service Provider*.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3.4.

S5.3.4 Settings of protection and control systems

A *Network User* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3 if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, also by *AEMO*. A *Network User* must not allow its *plant* to take *supply* of electricity from the *power system* without such prior approval.

If a *Network User* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that the changed setting would cause the *plant* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that a setting of a *control system* or *protection system* of the *plant* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *AEMO* (as applicable) must consult with the *Network User*, and the *Network Service Provider* may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting.

A *Network User* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Network User* must, on request, provide both *AEMO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Network User* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Network User* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Network User* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3.5 Power factor requirements

Automatic access standard: For *loads* equal to or greater than 30 percent of the *maximum demand* at the *connection point* the *power factor*s for *Network Users* and for *distribution networks connected* to another *transmission network* or *distribution network* are shown in Table S5.3.1:

Table S5.3.1

Permissible Range	
Supply Voltage (nominal)	**Power Factor Range**
> 400 kV	0.98 lagging to unity
250 kV - 400 kV	0.96 lagging to unity
50 kV - 250 kV	0.95 lagging to unity
1 kV < 50 kV	0.90 lagging to 0.90 leading

For *load* less than 30 percent of the *maximum demand* at the *connection point* a *Network Service Provider* may accept a *power factor* outside the range stipulated in Table S5.3.1 provided this does not cause the *system standards* to be violated.

Minimum access standard: A *Network Service Provider* may permit a lower lagging or leading *power factor* where the *Network Service Provider* is advised by *AEMO* that this will not detrimentally affect *power system security* or reduce *intra-regional* or *inter-regional power transfer capability.*

General:

If the *power factor* falls outside the relevant *performance standard* over any critical *loading* period nominated by the *Network Service Provider*, the *Network User* must, where required by the *Network Service Provider* in order to maintain satisfactory *voltage* levels at the *connection point* or to restore *intra-regional* or *inter-regional power transfer capability*, take action to ensure that the *power factor* falls within range as soon as reasonably practicable. This may be achieved by installing additional *reactive plant* or reaching a commercial agreement with the *Network Service Provider* to install, operate and maintain equivalent *reactive plant* as part of the *connection assets* or by alternative commercial arrangements with another party.

A *Registered Participant* who installs *shunt capacitors* to comply with *power factor* requirements must comply with the *Network Service Provider's* reasonable requirements to ensure that the design does not severely attenuate audio *frequency* signals used for *load* control or operations, or adversely impact on harmonic *voltage* levels at the *connection point*.

S5.3.6 Balancing of load currents

A *Network Service Provider* may require a *connected Registered Participant's load* to be balanced across all phases in order to maintain the negative sequence *voltage* at each *connection point* at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Network User* must ensure that:

(a) for *connections* at 30 kV or higher *voltage,* the current in any phase is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases; and

(b) for *connections* at *voltages* less than 30 kV, that the current in any phase is not greater than 105 percent or less than 95 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Network User* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Network User* does not cause the limits specified in clause S5.1a.7 to be exceeded at any point in the *network*.

General:

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

Where these requirements cannot be met the *Registered Participant* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Registered Participant*.

The limit to *load* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3.7 Voltage fluctuations

(a) *Automatic access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(a).

(b) *Minimum access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3.8 Harmonics and voltage notching

(a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).

(b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and is subject to verification of compliance by the *Network Service Provider*.

S5.3.9 Design requirements for Network Users' substations

A *Network User* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

(a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;

(b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;

(c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;

(d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;

(e) *synchronisation facilities* or reclose blocking must be provided if a *generating unit* is *connected* through the *substation*;

(f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;

(g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;

(h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and

(i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3.10 Load shedding facilities

Network Users who are *Market Customers* and who have expected peak demands in excess of 10MW must provide automatic *interruptible load* in accordance with clause 4.3.5 of the *Rules*.

Load shedding procedures may be applied by *AEMO* in accordance with the provisions of clause 4.3.2 of the *Rules* for the shedding of all *loads* including *sensitive loads.*

Schedule 5.3a - Conditions for connection of Market Network Services

S5.3a.1a Introduction to the schedule

This schedule sets out obligations of *Market Network Service Providers* who *connect* to either a *transmission network* or a *distribution network*. It represents the requirements to be met for access to a *network*. Particular provisions may be varied by the *Network Service Provider* under the provisions of the *Rules* for the application of *minimum access standards* and *automatic access standards.*

This schedule includes specific provisions for the determination of *automatic access standards* and *negotiated access standards* derived from *minimum access standards* which, once determined, must be recorded together with the *automatic access standards* in a *connection agreement* and registered with *AEMO* as *performance standards.*

In this schedule, the term "*Network Service Provider*" applies only to the *Network Service Provider* with whom the *Market Network Service Provider* has lodged, or is considering lodging, an *application to connect*.

(a) The schedule includes, in respect of each *market network service*, provisions regarding the capability to:

(1) automatically control the transfer of real power at the *connection point* for any given set of *system* conditions within the limits permitted under the *Rules*;

(2) respond to control requirements under expected normal and abnormal conditions;

(3) comply with general requirements to meet quality of *supply* obligations in accordance with clauses S5.3a.9, S5.3a.10 and S5.3a.11 and to maintain security of *supply* to other *Registered Participants*; and

(4) automatically *disconnect* itself when necessary to prevent any damage to the *market network service facilities* or threat to *power system security*.

(b) This schedule also sets out the requirements and conditions, which (subject to clause 5.2.3 of the *Rules*) are obligations of *Market Network Service Providers* to:

(1) co-operate with the relevant *Network Service Provider* on technical matters when making a new *connection*;

(2) provide information to the *Network Service Provider* or *AEMO;* and

(3) observe and apply the relevant provisions of the *system standards* contained in schedule 5.1a in relation to the planning, design and operation of its *market network service facilities*.

(c) This schedule does not set out arrangements by which a *Market Network Service Provider* may enter into an agreement or contract with *AEMO* to:

(1) provide additional services that are necessary to maintain *power system security*; or

(2) provide additional service to facilitate management of the *market*.

S5.3a.1 Provision of Information

(a) Before a *Market Network Service Provider connects* any new or additional equipment to a *network*, the *Market Network Service Provider* must submit the following kinds of information to the *Network Service Provider*:

(1) a single line diagram with the protection details;

(2) *metering system* design details for any metering equipment being provided by the *Market Network Service Provider*;

(3) a general arrangement locating all relevant equipment on the site;

(4) a general arrangement for each new or altered *substation* showing all exits and the position of all electrical equipment;

(5) type test certificates for all new switchgear and *transformers*, including measurement *transformers* to be used for *metering* purposes in accordance with Chapter 7 of the *Rules*;

(6) earthing details;

(7) the proposed methods of earthing cables and other equipment to comply with the regulations of the relevant *participating jurisdiction*;

(8) *plant* and earth grid test certificates from approved test authorities;

(9) a secondary injection and trip test certificate on all circuit breakers;

(10) certification that all new equipment has been inspected before being *connected* to the *supply*; and

(11) operational arrangements.

(b) For the purposes of clause 5.3.2(f) of the *Rules*, the technical information that a *Network Service Provider* must, if requested, provide to a *Connection*

Applicant in respect of the proposed *connection* of a *market network service facility* includes:

(1) the highest expected single phase and three phase fault levels at the *connection point* without the proposed *connection*;

(2) the clearing times of the existing *protection systems* that would clear a fault at the location at which the new *connection* would be connected into the existing *transmission system* or *distribution system*;

(3) the expected limits of *voltage* fluctuation, harmonic *voltage* distortion and *voltage* unbalance at the *connection point* without the proposed *connection*;

(4) technical information relevant to the *connection point* without the proposed *connection* including equivalent source impedance information, sufficient to estimate fault levels, *voltage* fluctuations, harmonic *voltage* distortion and *voltage* unbalance; and

(5) any other information or data not being *confidential information* relating to the performance of the *Network Service Provider's facilities* that is reasonably necessary for the *Connection Applicant* to prepare an *application to connect*;

except where the *Connection Applicant* agrees the *Network Service Provider* may provide alternative or less detailed technical information in satisfaction of this clause S5.3a.1(b).

S5.3a.2 Application of settings

A *Market Network Service Provider* must only apply settings to a *control system* or a *protection system* that are necessary to comply with performance requirements of this schedule 5.3a if the settings have been approved in writing by the *Network Service Provider* and, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, also by *AEMO*. A *Market Network Service Provider* must not allow its *market network service facilities* to take electricity from the *power system* without such prior approval.

If a *Market Network Service Provider* seeks approval from the *Network Service Provider* to apply or change a setting, approval must not be withheld unless the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that the changed setting would cause the *market network service facilities* to not comply with the relevant *performance standard* or cause an *inter-regional* or *intra-regional power transfer capability* to be reduced.

If the *Network Service Provider* or, if the requirement is one that would involve *AEMO* under clause 5.3.4A(c) of the *Rules*, *AEMO*, reasonably determines that a

setting of a *market network service facility's control system* or *protection system* needs to change to comply with the relevant *performance standard* or to maintain or restore an *inter-regional* or *intra-regional power transfer capability*, the *Network Service Provider* or *AEMO* (as applicable) must consult with the *Market Network Service Provider*, and may request in writing that a setting be applied in accordance with the determination.

The *Network Service Provider* may also request a test to verify the performance of the relevant *plant* with the new setting. The *Network Service Provider* must provide *AEMO* with a copy of its request to a *Market Network Service Provider* to apply a setting or to conduct a test.

A *Market Network Service Provider* who receives such a request must arrange for the notified setting to be applied as requested and for a test to be conducted as requested. After the test, the *Market Network Service Provider* must, on request, provide both *AEMO* and the *Network Service Provider* with a report of a requested test, including evidence of its success or failure. Such a report of a test is *confidential information*.

A *Market Network Service Provider* must not change a setting requested by the *Network Service Provider* without its prior written agreement. If the *Network Service Provider* requires a *Market Network Service Provider* to change a setting within 18 months of a previous request, the *Network Service Provider* must pay the *Market Network Service Provider* its reasonable costs of changing the setting and conducting the tests as requested.

S5.3a.3 Technical matters to be co-ordinated

A *Market Network Service Provider* and the relevant *Network Service Provider* must use all reasonable endeavours to agree upon the following matters in respect of each new or altered *connection* of a *market network service facility* to a *network*:

(a) design at the *connection point*;

(b) physical layout adjacent to the *connection point*;

(c) primary protection and backup protection (clause S5.3a.6);

(d) control characteristics (clause S5.3a.4);

(e) communications and alarms (clause S5.3a.4);

(f) insulation co-ordination and lightning protection;

(g) fault levels and *fault clearance times*;

(h) switching and *isolation facilities*;

(i) interlocking arrangements; and

(j) *metering installations* as described in Chapter 7 of the *Rules*.

S5.3a.4 Monitoring and control requirements

S5.3a.4.1 Remote Monitoring

(a) *Automatic access standard*:

(1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time, the quantities that *AEMO* reasonably requires to discharge its *market* and *power system security* functions as set out in Chapters 3 and 4 of the *Rules* respectively.

(2) The quantities may include such data as current, *voltage*, *active power*, *reactive power*, operational limits and critical temperatures in respect of *connection points* and power conversion systems.

(b) *Minimum access standard*:

(1) Each *market network service facility* must have *remote monitoring equipment* to transmit to *AEMO's control centres* in real time:

(A) *connection point active power* flow, *reactive power* flow and *voltage*;

(B) *active power*, *reactive power* and *voltage* for AC power lines, *transformers* and *busbars*, and power and *voltage* (or alternatively current) for DC power lines; and

(C) the status of circuit breakers.

(c) The negotiation of access standards in relation to this clause S5.3a.4.1 must involve *AEMO* under clause 5.3.4A(c) of the *Rules*.

S5.3a.4.2 [Deleted]

S5.3a.4.3 Communications equipment

A *Market Network Service Provider* must provide electricity *supplies* for *remote monitoring equipment* and *remote control equipment* installed in relation to its *market network service facilities* capable of keeping such equipment available for at least three hours following total loss of *supply* at the *connection point* for the relevant *market network service facility*.

A *Market Network Service Provider* must provide communications paths (with appropriate redundancy) from the *remote monitoring equipment* or *remote control equipment* installed at any of its *market network service facilities* to a communications interface in a location reasonably acceptable to the *Network Service Provider* at the relevant *connection point*. Communications systems between this communications interface and the *control centre* are the responsibility of the *Network Service Provider* unless otherwise agreed by the *Market Network Service Provider* and the *Network Service Provider*.

Telecommunications between *Network Service Providers* and *Market Network Service Providers* for *operational communications* must be established in accordance with the requirements set down below.

(a) Primary Speech Facility

The relevant *Network Service Provider* must provide and maintain equipment by means of which routine and emergency control telephone calls may be established between the *Market Network Service Provider's* responsible Engineer/Operator and *AEMO*.

The *facilities* to be provided, including the interface requirement between the *Network Service Provider's* equipment and the *Market Network Service Provider's* equipment, must be specified by the *Network Service Provider*.

The costs of the equipment must be recovered by the *Network Service Provider* only through the charge for *connection.*

(b) Back-up Speech Facility

Where the *Network Service Provider* or *AEMO* reasonably determines that a back-up speech *facility* to the primary *facility* is required, the *Network Service Provider* must provide and maintain a separate telephone link or radio installation on a cost-recovery basis only through the charge for *connection.*

The *Network Service Provider* is responsible for radio system planning and for obtaining all necessary radio licences.

S5.3a.5 Design standards

A *Market Network Service Provider* must ensure that:

(a) the electrical *plant* in its *facility* complies with the relevant *Australian Standards* as applicable at the time of first installation of that electrical *plant* in the *facility*;

(b) circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* are capable of breaking, without damage or restrike, fault currents nominated by the *Network Service Provider* in the relevant *connection agreement*; and

(c) all new equipment including circuit breakers provided to isolate the *Market Network Service Provider's facilities* from the *Network Service Provider's facilities* is capable of withstanding, without damage, power *frequency voltages* and impulse levels nominated by the *Network Service Provider* in accordance with the relevant provisions of the *system standards* and recorded in the relevant *connection agreement*.

S5.3a.6 Protection systems and settings

A *Market Network Service Provider* must ensure that all *connections* to the *network* are protected by protection devices which effectively and safely *disconnect* any faulty circuit automatically within a time period specified by the *Network Service Provider* in accordance with the following provisions:

(a) The *automatic access standard* is:

(1) Primary *protection systems* must be provided to *disconnect* any faulted element from the *power system* within the applicable *fault clearance time* determined under clause S5.1.9(a)(1), but subject to clauses S5.1.9(k) and S5.1.9(l).

(2) Each primary *protection system* must have sufficient redundancy to ensure that a faulted element within its protection zone is *disconnected* from the *power system* within the applicable *fault clearance time* with any single protection element (including any communications facility upon which that *protection system* depends) out of service.

(3) *Breaker fail protection systems* must be provided to clear faults that are not cleared by the circuit breakers controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(1).

(b) The *minimum access standard* is:

(1) Primary *protection systems* must be provided to *disconnect* from the *power system* any faulted element within their respective protection zones within the applicable *fault clearance time* determined under clause S5.1.9(a)(2), but subject to clauses S5.1.9(k) and S5.1.9(l).

(2) If a *fault clearance time* determined under clause S5.1.9(a)(2) for a protection zone is less than 10 seconds, a *breaker fail protection system* must be provided to clear from the *power system* any fault within that protection zone that is not cleared by the circuit breakers

controlled by the primary *protection system*, within the applicable *fault clearance time* determined under clause S5.1.9(a)(3).

(c) The *Network Service Provider* and the *Market Network Service Provider* must cooperate in the design and implementation of *protection systems* to comply with this clause, including cooperation with regard to:

(1) the use of *current transformer* and *voltage transformer* secondary circuits (or equivalent) of one party by the *protection system* of the other;

(2) tripping of one party's circuit breakers by a *protection system* of the other party; and

(3) co-ordination of *protection system* settings to ensure inter-operation.

The *Market Network Service Provider* must ensure that the protection settings of its protective equipment grade with the *Network Service Provider's transmission system* or *distribution system* protection settings. Similarly the grading requirements of fuses must be co-ordinated with the *Network Service Provider*. The *Market Network Service Provider* must provide details of the protection scheme implemented by the *Market Network Service Provider* to the *Network Service Provider* and must liaise with the *Network Service Provider* when determining gradings and settings.

The application of settings of the protection scheme must be undertaken in accordance with clause S5.3a.2.

Before the *Market Network Service Provider's* installation is *connected* to the *Network Service Provider's transmission or distribution system* the *Market Network Service Provider's protection system* must be tested and the *Market Network Service Provider* must submit the appropriate test certificate to the *Network Service Provider*.

S5.3a.7 [Deleted]

S5.3a.8 Reactive power capability

Subject to the access standards stated in this clause S5.3a.8, if additional *reactive support* is required as a result of the *connection* or operation of the *network elements* which provide a *market network service* then the requisite *reactive support* must be supplied or paid for by the *Market Network Service Provider*.

Additional reactive support is required if, at rated power output as measured at the *connection point* of the *market network service* the *market network service* has a lagging power factor of less than 0.9 or a leading power factor of less than 0.95.

Automatic access standard: For power export, at rated power output and target *network voltage* as determined in accordance with clause S5.1a.4 of the *system standards* when measured at the *connection point* of the *market network service,* the *market network service* must be capable of operation in the range from a lagging power factor of 0.9 to a leading power factor of 0.95. For power import, the power factor must satisfy the requirements of clause S5.3.5 of schedule 5.3.

Minimum access standard: With the agreement of *AEMO* and the *Network Service Provider*, a power factor capability less than that defined by the *automatic access standard* may be provided if the requirements of the *system standards* are satisfied under all operating conditions of the *market network service*.

S5.3a.9 Balancing of load currents

A *Network Service Provider* may require a *Market Network Service Provider's power transfer* to be balanced at a *connection point* in order to maintain the negative sequence *voltage* at each connection point at less than or equal to the limits set out in Table S5.1a.1 of the *system standards* for the applicable nominal *supply voltage* level.

Automatic access standard: A *Market Network Service Provider* must ensure that for *connections* at 11kV or higher *voltage*, the current in any phase drawn by its equipment from the *Network Service Provider's network* is not greater than 102 percent or less than 98 percent of the average of the currents in the three phases.

Minimum access standard: Where agreed with the relevant *Network Service Provider* and subject to any specific conditions imposed, a *Market Network Service Provider* may cause current unbalance greater than that specified in the *automatic access standard* provided the *Market Network Service Provider* does not cause the limits specified in clause S5.1a.7 of the *system standards* to be exceeded at any point in the *network*.

Where these requirements cannot be met the *Market Network Service Provider* may enter into a commercial arrangement with the *Network Service Provider* for the installation of equipment to correct the phase unbalance. Such equipment must be considered as part of the *connection assets* for the *Market Network Service Provider*.

The limit to *power transfer* current unbalance must be included in the *connection agreement* and is subject to verification of compliance by the *Network Service Provider*.

S5.3a.10 Voltage fluctuations

(a) *Automatic access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from

energisation, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(a).

(b) *Minimum access standard*: The *voltage* fluctuations caused by variations in *loading level* at the *connection point*, including those arising from *energisation*, de-energisation or other operation of *plant*, must not exceed the limits determined under clause S5.1.5(b).

The *voltage* fluctuation emission limits and any specified conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.11 Harmonics and voltage notching

(a) *Automatic access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(a).

(b) *Minimum access standard*: The harmonic *voltage* distortion caused by non-linearity, commutation of power electronic equipment, harmonic resonance and other effects within the *plant*, must not exceed the limits determined under clause S5.1.6(b).

A *Market Network Service Provider* must ensure that all of its *plant connected* to a *transmission network* or *distribution network* is capable of withstanding the effects of harmonic levels produced by that *plant* plus those imposed from the *network*.

The harmonic *voltage* distortion emission limits and any special conditions must be included in the *connection agreement*, and are subject to verification of compliance by the *Network Service Provider*.

S5.3a.12 Design requirements for Market Network Service Providers' substations

A *Market Network Service Provider* must comply with the following requirements applicable to the design, station layout and choice of equipment for a *substation*:

(a) safety provisions must comply with requirements applicable to the *participating jurisdiction* notified by the *Network Service Provider*;

(b) where required by the *Network Service Provider*, appropriate interfaces and accommodation must be incorporated for communication *facilities*, remote monitoring and control and protection of *plant* which is to be installed in the *substation*;

(c) a *substation* must be capable of continuous uninterrupted operation with the levels of *voltage*, harmonics, unbalance and *voltage* fluctuation specified in the *system standards* as modified in accordance with the relevant provisions of schedule 5.1;

(d) earthing of primary *plant* in the *substation* must be in accordance with the Electricity Supply Association of Australia Safe Earthing Guide and must reduce step and touch potentials to safe levels;

(e) *synchronisation facilities* or reclose blocking must be provided if necessary;

(f) secure electricity supplies of adequate capacity must be provided for *plant* performing communication, monitoring, control and protection functions;

(g) *plant* must be tested to ensure that the *substation* complies with the approved design and specifications as included in a *connection agreement*;

(h) the protection equipment required would normally include protection schemes for individual items of *plant*, back-up arrangements, auxiliary DC supplies and instrumentation *transformers*; and

(i) insulation levels of *plant* in the *substation* must co-ordinate with the insulation levels of the *network* to which the *substation* is *connected* as nominated in the *connection agreement*.

S5.3a.13 Market network service response to disturbances in the power system

(a) Each *market network service* must be capable of continuous uninterrupted operation during the occurrence of:

(1) *power system frequency* within the *frequency operating standards*; or

(2) the range of *voltage* variation conditions permitted by the *system standards*.

(b) The equipment associated with each *market network service* must be designed to withstand without damage or reduction in life expectancy the harmonic distortion and *voltage* unbalance conditions determined to apply in accordance with the provisions of schedule 5.1, clauses S5.1.6 and S5.1.7, respectively, at the *connection point*.

S5.3a.14 Protection of market network services from power system disturbances

(a) *Minimum access standard*: If a *Connection Applicant* requires that its *market network service facility* be automatically *disconnected* from the *power system* in response to abnormal conditions arising from the *power*

system, the relevant *protection system* or *control system* must not *disconnect* the *facility* for conditions under which it must continuously operate or must withstand under a provision of the *Rules*.

(b) There is no *automatic access standard* for this technical requirement.

(c) For the purposes of this clause S5.3a.14, the abnormal conditions include:

(1) *frequency* outside the *extreme frequency excursion tolerance limits*;

(2) sustained and uncontrollable DC current beyond a short term current rating for the period assigned to that rating;

(3) DC *voltage* above the *voltage* maximum rating or sustained below any lower limit for stable operation;

(4) *voltage* to *frequency* ratio beyond *a transformer* magnetic flux based *voltage* to *frequency* rating;

(5) sustained *voltage* fluctuations at the *connection point* beyond the level determined under clause S5.1.5(a);

(6) sustained harmonic *voltage* distortion at the *connection point* beyond the level determined under clause S5.1.6(a);

(7) sustained negative phase sequence *voltage* at the *connection point* beyond the level determined under clause S5.1.7(a); and

(8) any similar condition agreed between the *Market Network Service Provider* and *AEMO* after consultation with each relevant *Network Service Provider*.

(d) The negotiation of access standards in relation to this clause S5.3a.14 must involve *AEMO* under clause 5.3.4A(c) of the *Rules*.

(e) The *Network Service Provider* is not liable for any loss or damage incurred by the *Market Network Service Provider* or any other person as a consequence of a fault on either the *power system*, or within the *Market Network Service Provider's facility*.

Schedule 5.4 - Information to be Provided with Preliminary Enquiry

The following items of information are required to be submitted with a preliminary enquiry for *connection* or modification of an existing *connection*:

(a) Type of *plant* - (eg. gas turbine *generating unit*; rolling mill, etc.).

(b) Preferred site location - (listing any alternatives in order of preference as well).

(c) Maximum power *generation* or demand of whole *plant* - (maximum MW and/or MVA, or average over 15 minutes or similar).

(d) Expected *energy* production or consumption (MWh per month).

(e) *Plant* type and configuration - (eg. number and type of *generating units* or number of separate production lines).

(f) Nature of any disturbing *load* (size of disturbing component MW/MVAr, duty cycle, nature of power electronic *plant* which may produce harmonic distortion).

(g) Technology of proposed *generating unit* (e.g. *synchronous generating unit*, induction generator, photovoltaic array, etc).

(h) When *plant* is to be in service - (eg. estimated date for each *generating unit*).

(i) Name and address of enquirer, and, if relevant, of the party for whom the enquirer is acting.

(j) Other information may be requested by the *Network Service Provider*, such as amount and timing of power required during construction or any auxiliary power requirements.

Schedule 5.5 - Technical Details to Support Application for Connection and Connection Agreement

S5.5.1 Introduction to the schedule

Various sections of the *Rules* require that *Registered Participants* submit technical data to the *Network Service Provider*. This schedule lists the range of data which may be required. The actual data required will be advised by the *Network Service Provider*, and will form part of the technical specification in the *connection agreement*. These data will also be made available to *AEMO* and to other *Network Service Provider*s by the *Network Service Provider* at the appropriate time.

S5.5.2 Categories of data

Data is coded in categories, according to the stage at which it is available in the build-up of data during the process of forming a *connection* or obtaining access to a *network*, with data acquired at each stage being carried forward, or enhanced in subsequent stages, eg. by testing.

Preliminary system planning data

Preliminary system planning data is required for submission with the *application to connect*, to allow the *Network Service Provider* to prepare an offer of terms and conditions for a *connection agreement* and to assess the requirement for, and effect of, *network augmentation* or *extension* options. Such data is normally limited to the items denoted as Standard Planning Data (S) in the *Generating System Model Guidelines*, *Generating System Design Data Sheet, Generating System Setting Data Sheet* and in schedules 5.5.3 to 5.5.5.

The *Network Service Provider* may, in cases where there is reasonable doubt as to the viability of a proposal, require the submission of other data before making an offer to *connect* or to amend a *connection agreement*.

Registered system planning data

Registered system planning data is the class of data which will be included in the *connection agreement* signed by both parties. It consists of the preliminary system planning data plus those items denoted in the attached schedules as Detailed Planning Data (D). The latter must be submitted by the *Registered Participant* in time for inclusion in the *connection agreement*.

Registered data

Registered Data consists of data validated and agreed between the *Network Service Provider* and the *Registered Participant*, such data being:

(a) prior to actual *connection* and provision of access, data derived from manufacturers' data, detailed design calculations, works or site tests etc. (R1); and

(b) after connection, data derived from on-system testing (R2).

All of the data will, from this stage, be categorised and referred to as Registered Data; but for convenience the schedules omit placing a higher ranked code next to items which are expected to already be valid at an earlier stage.

S5.5.3 Review, change and supply of data

Data will be subject to review at reasonable intervals to ensure its continued accuracy and relevance. The *Network Service Provider* must initiate this review. A *Registered Participant* may *change* any data item at a time other than when that item would normally be reviewed or updated by submission to the *Network Service Provider* of the revised data, together with authentication documents, eg. test reports.

The *Network Service Provider* must supply data relating to its system to other *Network Service Provider*s for planning purposes and to other *Registered Participants* and *AEMO* as specified in the various sections of the *Rules*, including through the *statement of opportunities*.

S5.5.4 Data Requirements

Schedules 5.5.3 to 5.5.5 cover the following data areas:

(a) schedule 5.5.3 - Network Plant Technical Data. This comprises fixed electrical parameters.

(b) schedule 5.5.4 - Plant and Apparatus Setting Data. This comprises settings which can be varied by agreement or by direction of the *Network Service Provider* or *AEMO*.

(c) schedule 5.5.5 - *Load* Characteristics. This comprises the estimated design parameters of *loads*.

The documents and schedules applicable to each class of *Registered Participant* are as follows:

(a) *Generators*: the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*;

(b) *Customers* and *Network Service Providers*: schedules 5.5.3 and 5.5.4; and

(c) *Customers:* schedule 5.5.5.

S5.5.5 Asynchronous generating unit data

A *Generator* that *connects* a *generating system*, that is an *asynchronous generating unit*, must be given exemption from complying with those parts of the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet* that are determined by the *Network Service Provider* to be not relevant to such *generating systems*, but must comply with those parts of schedules 5.5.3, 5.5.4, and 5.5.5 that are relevant to such *generating systems*, as determined by the *Network Service Provider*.

S5.5.6 Generating units equal to or smaller than 30MW data

A *Generator* that *connects* a *generating unit* equal to or smaller than 30 MW or a number of *generating units* totalling less than 30 MW to a *connection point* to a *distribution network* will usually be required to submit less registered system planning data and less registered data than is indicated in the *Generating System Model Guidelines*, *Generating System Design Data Sheet* and *Generating System Setting Data Sheet*. In general these data will be limited to confirmation of the preliminary system planning data, marked (S), but other data must be supplied if reasonably required by the *Network Service Provider* or *AEMO*.

Codes:

S = Standard Planning Data

D = Detailed Planning Data

R = Registered Data (R1 pre-*connection*, R2 post-*connection*)

S5.5.7 Generating System Design Data Sheet, Generating System Setting Data Sheet and Generating System Model Guidelines

(a) *NEMMCO* must, subject to paragraph (b), develop and *publish* by 1 March 2008, in accordance with the *Rules consultation procedures:*

(1) a *Generating System Design Data Sheet* describing, for relevant technologies, the *generating system* design parameters of *generating units* and *generating systems* including *plant* configurations, impedances, time constants, non-linearities, ratings and capabilities, to be provided under clauses S5.2.4 and this schedule 5.5;

(2) a *Generating System Setting Data Sheet* describing, for relevant *generation* and *control system* technologies, the *protection system* and *control system* settings of *generating units* and *generating systems* including configurations, gains, time constants, delays, deadbands, non-linearities and limits, to be provided under clauses S5.2.4 and this schedule 5.5; and

(3) *Generating System Model Guidelines* describing, for relevant *generation* and *control system* technologies, *NEMMCO's* requirements when developing mathematical models for *generating units* and *generating systems*, including the impact of their *control systems* and *protection systems* on *power system security*,

and there must be a *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and *Generating System Model Guidelines* in place at all times after that date.

(b) When developing and *publishing* the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and *Generating System Model Guidelines* under paragraph (a), *NEMMCO* must have regard to the purpose of developing and *publishing* the sheets and guidelines which is to:

(1) allow *generating units* and *generating systems* to be mathematically modelled by *NEMMCO* in load flow and dynamic stability assessments with sufficient accuracy to permit:

(i) the *power system* operating limits for ensuring *power system security* to be quantified with the lowest practical safety margins;

(ii) proposed *access standards* and *performance standards* of *generating units* and *generating systems* to be assessed; and

(iii) settings of *control systems* and *protection systems* of *generating units*, *generating systems* and *networks* to be assessed and quantified for maximum practical performance of the *power system;* and

(2) identify for each type of data its category in terms of clause S5.5.2.

(c) Any person may submit a request (with written reasons) to *AEMO* to amend the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* and *AEMO* must conduct the *Rules consultation procedures* in relation to the request.

(d) *AEMO* can make amendments requested under paragraph (c) or otherwise to the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* or the *Generating System Model Guidelines* without conducting the *Rules consultation procedures* if the amendment is minor or administrative in nature.

(e) *AEMO* may at the conclusion of the *Rules consultation procedures* under paragraph (c) or otherwise under paragraph (d), amend the relevant data sheet or guidelines (if necessary).

Schedule 5.5.1 - [Deleted]

Schedule 5.5.2 - [Deleted]

Schedule 5.5.3 - Network and plant technical data of equipment at or near connection point

Data Description	Units	Data Category
Voltage Rating		
Nominal v*oltage*	kV	S, D
Highest *voltage*	kV	D
Insulation Co-ordination		
Rated lightning impulse withstand *voltage*	kVp	D
Rated short duration power *frequency* withstand *voltage*	kV	D
Rated Currents		
Circuit maximum current	kA	S, D
Rated Short Time Withstand Current	kA for seconds	D
Ambient conditions under which above current applies	Text	S,D
Earthing		
System Earthing Method	Text	S, D
Earth grid rated current	kA for seconds	D
Insulation Pollution Performance		
Minimum total creepage	mm	D
Pollution level	Level of *IEC* 815	D
Controls		
Remote control and data transmission	Text	D

Data Description	Units	Data Category
arrangements		
Metering Provided by Customer		
Measurement *transformer* ratios:		D
Current transformers	A/A	D
Voltage transformers	V/kV	D
Measurement *Transformer* Test Certification details	Text	R1
Network Configuration		
Operation Diagrams showing the electrical circuits of the existing and proposed main *facilities* within the *Registered Participant's* ownership including *busbar* arrangements, phasing arrangements, earthing arrangements, switching *facilities* and operating *voltage*s.	Single line Diagrams	S, D, R1
Network Impedance		
For each item of *plant*: details of the positive, negative and zero sequence series and shunt impedance, including mutual coupling between physically adjacent elements.	% on 100 MVA base	S, D, R1
Short Circuit Infeed to the Network		
Maximum generator 3-phase short circuit infeed including infeeds from *generating units connected* to the *Registered Participant's system*, calculated by method of AS 3851 (1991).	kA symmetrical	S, D, R1
The total infeed at the instant of fault (including contribution of induction motors).	kA	D, R1
Minimum zero sequence impedance of *Registered Participant's network* at *connection point*.	% on 100 MVA base	D, R1
Minimum negative sequence impedance of *Registered Participant's network* at *connection point*.	% on 100 MVA base	D, R1

Data Description	Units	Data Category
Load Transfer Capability:		
Where a *load*, or group of *loads*, may be fed from alternative *connection points*:		
Load normally taken from *connection point* X	MW	D, R1
Load normally taken from *connection point* Y	MW	D, R1
Arrangements for transfer under planned or fault *outage* conditions	Text	D
Circuits Connecting Embedded Generating Units to the Network:		
For all g*enerating units*, all connecting lines/cables, *transformers* etc.		
Series Resistance	% on 100 MVA base	D, R
Series Reactance	% on 100 MVA base	D, R
Shunt Susceptance	% on 100 MVA base	D, R
Normal and short-time emergency ratings	MVA	D,R
Technical Details of *generating units* and *generating systems* as per the *Generating System Design Data Sheet*, *Generating System Setting Data Sheet* and the *Generating System Model Guidelines* where such details are not *confidential information*		
Transformers* at *connection points:		
Saturation curve	Diagram	R
Equipment associated with DC Links		
Number of poles	MVA	D,R
Converters per station	Quantity	D,R
Reactive Power consumption of converters	MCAr	D,R
Location and Rating of A.C. Filters	MVAr	D,R
Location and Rating of Shunt Capacitors	MVAr	D,R

Data Description	Units	Data Category
Location and Rating of Smoothing *Reactor*	MVAr	D,R
Location and Rating of DC Filter	MVAr	D,R

Schedule 5.5.4 - Network Plant and Apparatus Setting Data

Data Description	Units	Data Category
Protection Data for Protection relevant to Connection Point:		
Reach of all protections on *transmission lines*, or cables	ohms or % on 100 MVA base	S, D
Number of protections on each item	Text	S, D
Total fault clearing times for near and remote faults	ms	S, D, R1
Line reclosure sequence details	Text	S, D, R1
Tap Change Control Data:		
Time delay settings of all *transformer* tap changers.	Seconds	D, R1
Reactive Compensation:		
Location and Rating of individual *shunt reactors*	MVAr	D, R1
Location and Rating of individual *shunt capacitor* banks	MVAr	D, R1
Capacitor bank capacitance	microfarads	D
Inductance of switching *reactor* (if fitted)	millihenries	D
Resistance of capacitor plus *reactor*	Ohms	D
Details of special controls (e.g. Point-on-wave switching)	Text	D
For each shunt reactor or capacitor bank:		
Method of switching	Text	S
Details of automatic control logic such that	Text	D, R1

Data Description	Units	Data Category
operating characteristics can be determined		
FACTS Installation:		
Data sufficient to enable static and dynamic performance of the installation to be modelled	Text, diagrams control settings	S, D, R1
Transmission line flow control device	Text,	D
Details of the operation of the control device under normal operation conditions (including startup and shutdown of the line) and during a fault (close up and remote)	diagrams	
Models for the control device and transmission line appropriate for load flow, small signal stability and transient stability analysis	Text, diagrams	D
Capability of the line flow control device	KA, MVA, MW	D
Details of the rate of change of flow capability of the control device	Text	D
Details of the capability of the control device to provide frequency and voltage control	Text	D
Description of possible failure modes of control device	Text	D
Details of performance of the control device under disturbance conditions including changes in AC frequency, variations in AC system voltages and Ac system waveform distortion.	Text	D
For DC control devices, contribution to the AC system short circuit level	KA, MVA	D

Schedule 5.5.5 - Load Characteristics at Connection Point

Data Description	Units	Data Category
For all Types of Load		
Type of *Load*	Text	S

Data Description	Units	Data Category
eg controlled rectifiers or large motor drives		
For Fluctuating Loads		
Cyclic variation of *active power* over period	Graph MW/time	S
Cyclic variation of *reactive power* over period	Graph MVAr/time	S
Maximum rate of change of *active power*	MW/s	S
Maximum rate of change of *reactive power*	MVAr/s	S
Shortest Repetitive time interval between fluctuations in active and *reactive power* reviewed annually	s	S
Largest Step Change:		
In *active power*	MW	S
In *reactive power*	MVAr	S

Schedule 5.6 - Terms and Conditions of Connection agreements

The *connection agreements* must contain the specific conditions that have been agreed to for *connection* and access to the *transmission* or *distribution network*, including but not limited to:

(a) details of the *connection point* including the *distribution network coupling points* where appropriate;

(b) *metering* arrangements and adjustments for losses where the point of *metering* is significantly different to the *connection point*;

(c) authorised demand which may be taken or supplied at the *connection point* (under specified conditions);

(c1) details of each *access standard* agreed between the *Network Service Provider* and the *Registered Participant* and all related conditions of agreement resulting from the application of any access provisions contained in schedule 5.1 for *Network Service Providers,* or schedule 5.2 for *Generators,* or schedule 5.3 for *Customers,* or schedule 5.3a for *Market Network Service Providers*;

(d) *connection service* charges;

(e) payment conditions;

(f) duration and termination conditions of the *connection agreement*;

(g) terms, conditions and *constraints* that have been agreed to for *connection* to the *network* to protect the legitimate interest of the *Network Service Provider*s including rights to *disconnect* the *Registered Participant* for breach of commercial undertakings;

(h) details of any agreed standards of *reliability* of *transmission service* or *distribution service* at the *connection point*s or within the *network*;

(i) testing intervals for *protection systems* associated with the *connection point*;

(j) agreed protocols for maintenance co-ordination;

(k) where an expected *load*, to be connected to a *network*, has a *peak load* requirement in excess 10 MW, the provision, installation, operation and maintenance of automatic *load* shedding facilities for 60 percent of the *load* at anytime; and

(l) terms and conditions of access to the *metering installation* for the *Metering Provider*.

The *connection agreements* may include other technical, commercial and legal conditions governing works required for the *connection* or *extension* to the *network* which the parties have negotiated and agreed to. The circumstances under which the terms of the *connection agreement* would require renegotiation may also be included.

Schedule 5.7 - Annual Forecast Information for Planning Purposes

This schedule sets out the information in respect of each *connection point* that must be provided to the relevant *Network Service Provider* by each *Registered Participant* that has a *connection point* to a *transmission network* of that *Network Service Provider*.

Data Description	Units	Time Scale	Data Category
At each *connection point* to a *transmission network*, a forecast of:			
Annual Maximum *Active power* - Winter	MW	years 1-10	Annual
Coincident *Reactive Power* - Winter	MVAr	years 1-10	Annual
Annual Maximum *Active power* - Summer	MW	years 1-10	Annual
Coincident *Reactive Power* - Summer	MVAr	years 1-10	Annual
Forecast *load* diversity between each *connection point* to the *network* (winter and summer)	%	years 1-5	Annual
Load Profiles:			
The following forecast daily *profile*s of *connection point* half-hourly average active and reactive *loads* are required, net of all *generating plant*:			
Day of the peak summer and winter MW *peak load* at *connection point*	MW and MVAr	years 1-5	Annual
Day of *network* peak summer and winter MW *load* (as specified)	MW and MVAr	years 1-5	Annual

Data Description	**Units**	**Time Scale**	**Data Category**
Each July, October, January, April under average conditions representing:			
(a)weekdays	MW and MVAr	years 1-5	Annual
(b)Saturdays	MW and MVAr	years 1-5	Annual
(c)Sundays/holidays	MW and MVAr	years 1-5	Annual
Day of the *network* minimum demand (as specified)	MW and MVAr	years 1-5	Annual
Undispatched *generation*:			
For each *connection point* to the *network* the following information is required:			
No. of g*enerating unit*s	No.	years 1-5	Annual
Capacity of each *generating unit*	MW (*sent out*)	years 1-5	Annual
Daily/Seasonal Operating characteristics	Text	years 1-5	Annual
Expected output at time of peak *network* Winter *load* (as specified)	MW	years 1-5	Annual
Expected output at time of peak *network* Summer *load* (as specified)	MW	years 1-5	Annual

CHAPTER 6

Chapter 6 Economic Regulation of Distribution Services

Part A Introduction

6.1 Introduction to Chapter 6

6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

6.1.2 Structure of this Chapter

(a) This Chapter deals with the classification and economic regulation of *distribution services*.

(b) It is divided into parts as follows:

(1) this Part is introductory;

(2) Part B confers power on the *AER* to classify *distribution services*, to determine the forms of control for *distribution services*, and to make distribution determinations;

(3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;

(4) Part D regulates the prices that may be charged by *Distribution Network Service Providers* for the provision of services classified as *negotiated distribution services*;

(5) Part E sets out the procedures for making a distribution determination;

(6) Part F regulates cost allocation;

(7) Part G contains the distribution consultation procedures;

(8) Part H deals with ring-fencing;

(9) Part I deals with *tariff classes* and tariffs;

(10) Part J deals with billing and settlements;

(11) Part K deals with prudential requirements, prepayments and capital contributions;

(12) Part L deals with dispute resolution;

(13) Part M deals with the disclosure of transmission and distribution charges; and

(14) Part N provides for services provided by, or in connection with, *dual function assets* to be the subject of distribution determinations.

6.1.3 Access to direct control services and negotiated distribution services

(a) Subject to and in accordance with the *Rules*:

(1) a person (a *Service Applicant*) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;

(2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.

(b) The *terms and conditions of access* are:

(1) in relation to *negotiated distribution services*:

(i) the price of those services (including, if relevant, *access charges*); and

(ii) other terms and conditions for the provision of those services;

(2) in relation to *direct control services*:

(i) the price of those services under the *approved pricing proposal*; and

(ii) other terms and conditions for the provision of those services.

6.1.4 Prohibition of DUOS charges for the export of energy

(a) A *Distribution Network Service Provider* must not charge a *Distribution Network User distribution use of system* charges for the export of electricity generated by the user into the *distribution network*.

(b) This does not, however, preclude charges for the provision of *connection services*.

Part B Classification of Distribution Services and Distribution Determinations

6.2 Classification

6.2.1 Classification of distribution services

(a) The *AER* may classify a *distribution service* to be provided by a *Distribution Network Service Provider* as:

(1) a *direct control service*; or

(2) a *negotiated distribution service*.

Note:

If the AER decides against classifying a distribution service, the service is not regulated under the Rules.

(b) The *AER* may group *distribution services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.

(c) The *AER* must, in classifying a *distribution service* or *distribution services*, have regard to:

(1) the form of regulation factors; and

(2) the form of regulation (if any) previously applicable to the relevant service or services and, in particular, any previous classification under the present system of classification or under the previous regulatory system (as the case requires); and

(3) the desirability of consistency in the form of regulation for similar services (both within and beyond the relevant jurisdiction); and

(4) any other relevant factor.

(d) In classifying *distribution services* that have previously been subject to regulation under the present or earlier legislation, the *AER* must act on the basis that, unless a different classification is clearly more appropriate:

(1) there should be no departure from a previous classification (if the services have been previously classified); and

(2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.

(e) If the *Rules*, however, require that a particular classification be assigned to a *distribution service* of a specified kind, a *distribution service* of the relevant kind is to be classified in accordance with that requirement.

6.2.2 Classification of direct control services as standard control services or alternative control services

(a) *Direct control services* are to be further divided into 2 subclasses:

(1) *standard control services*; and

(2) *alternative control services*.

(b) The *AER* may group *direct control services* together for the purpose of classification and, if it does so, a single classification made for the group applies to each service comprised in the group as if it had been separately classified.

(c) The *AER* must, in classifying a *direct control service* as a *standard control service* or an *alternative control service*, have regard to:

(1) the potential for development of competition in the relevant market and how the classification might influence that potential; and

(2) the possible effects of the classification on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and

(3) the regulatory approach (if any) applicable to the relevant service immediately before the commencement of the distribution determination for which the classification is made; and

(4) the desirability of a consistent regulatory approach to similar services (both within and beyond the relevant jurisdiction); and

(5) the extent the costs of providing the relevant service are directly attributable to the customer to whom the service is provided; and

Example:

In circumstances where a service is provided to a small number of identifiable customers on a discretionary or infrequent basis, and costs can be directly attributed to those customers, it may be more appropriate to classify the service as an alternative control service than as a standard control service.

(6) any other relevant factor.

(d) In classifying *direct control services* that have previously been subject to regulation under the present or earlier legislation, the *AER* must act on the basis that, unless a different classification is clearly more appropriate:

(1) there should be no departure from a previous classification (if the services have been previously classified); and

(2) if there has been no previous classification – the classification should be consistent with the previously applicable regulatory approach.

(e) If the *Rules*, however, require that a *direct control service* of a specified kind be classified either as a *standard control service* or as an *alternative control service*, a *direct control service* of the relevant kind is to be classified in accordance with that requirement.

6.2.3 Term for which classification operates

A classification forms part of a distribution determination and operates for the *regulatory control period* for which the distribution determination is made.

Note:

The classification is to be reviewed in the course of the making of the next distribution determination, and (subject to these Rules) a reclassification may be made for the purposes of that determination.

6.2.4 Duty of AER to make distribution determinations

(a) The *AER* must make a distribution determination for each *Distribution Network Service Provider*.

(b) When the *AER* makes a distribution determination it must follow the process set out in Part E.

(c) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each *distribution system*.

(d) If 2 or more parts of the same *distribution system* were separately regulated at the commencement of this Chapter, then, unless the *AER* otherwise determines, a separate distribution determination is to be made for each of those parts of the *distribution system*.

6.2.5 Control mechanisms for direct control services

(a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.

(b) The control mechanism may consist of:

(1) a schedule of fixed prices; or

(2) caps on the prices of individual services; or

(3) caps on the revenue to be derived from a particular combination of services; or

(4) tariff basket price control; or

(5) revenue yield control; or

(6) a combination of any of the above.

(c) In deciding on a control mechanism for *standard control services*, the *AER* must have regard to:

(1) the need for efficient tariff structures; and

(2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and

(3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and

(4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and

(5) any other relevant factor.

(d) In deciding on a control mechanism for *alternative control services*, the *AER* must have regard to:

(1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and

(2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and

(3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and

(4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and

(5) any other relevant factor.

6.2.6 Basis of control mechanisms for direct control services

(a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.

(b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.

(c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

Examples:

The control mechanism might be based on the building block approach.

The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.

6.2.7 Negotiated distribution services

Negotiated distribution services are regulated in accordance with Part D.

6.2.8 Guidelines

(a) The *AER* may *publish* guidelines as to:

(1) the classification of *distribution services*; and

(2) the control mechanisms for *direct control services*; and

(3) the calculation of stand-alone, avoidable and long-run marginal costs; and

(4) the *AER's* likely approach to determining materiality in the context of possible *pass through events*; and

(5) other matters relevant to this Chapter.

(b) The guidelines may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.

(c) The guidelines are not mandatory (and hence do not bind the *AER* or anyone else) but, if the *AER* makes a distribution determination that is not in accordance with a relevant guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline.

(d) If the guidelines indicate that there may be a change of regulatory approach in future distribution determinations, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.

(e) In making or amending a guideline, the *AER* must follow the *distribution consultation procedures* in Part G.

Part C Building Block Determinations for standard control services

6.3 Building block determinations

6.3.1 Introduction

(a) A *building block determination* is a component of a distribution determination.

(b) The procedure for making a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the *AER* by the *Distribution Network Service Provider*.

(c) The *building block proposal*:

(1) must be prepared in accordance with the *post-tax revenue model*, other relevant requirements of this Part, and Schedule 6.1; and

(2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

6.3.2 Contents of building block determination

(a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:

(1) the *Distribution Network Service Provider*'s *annual revenue requirement* for each *regulatory year* of the *regulatory control period*;

(2) appropriate methods for the indexation of the regulatory asset base;

(3) how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* are to apply to the *Distribution Network Service Provider*;

(4) the commencement and length of the *regulatory control period*;

(5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the service provider's *building block proposal* and those based on the *AER*'s own estimates or assumptions).

(b) A *regulatory control period* must be not less than 5 *regulatory years*.

6.4 Post-tax revenue model

6.4.1 Preparation, publication and amendment of post-tax revenue model

(a) The *AER* must, in accordance with the *distribution consultation procedures*, prepare and *publish* a *post-tax revenue model*.

(b) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *post-tax revenue model.*

(c) The *AER* must develop and *publish* the first *post-tax revenue model* within 6 months after the commencement of this clause and there must be such a model in force at all times after that date.

6.4.2 Contents of post-tax revenue model

(a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider*'s *annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.

(b) The contents of the *post-tax revenue model* must include (but are not limited to):

(1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and

(2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and

(3) the manner in which working capital is to be treated; and

(4) the manner in which the estimated cost of corporate income tax is to be calculated.

6.4.3 Building block approach

(a) Building blocks generally

The *annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building block approach, under which the building blocks are:

(1) indexation of the regulatory asset base – see paragraph (b)(1); and

(2) a return on capital for that year – see paragraph (b)(2); and

(3) the depreciation for that year – see paragraph (b)(3); and

(4) the estimated cost of corporate income tax of the provider for that year – see paragraph (b)(4); and

(5) the revenue increments or decrements (if any) for that year arising from the application of the *efficiency benefit sharing scheme*, the *service target performance incentive scheme* and the *demand management incentive scheme* – see paragraph (b)(5); and

(6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6); and

(7) the forecast operating expenditure for that year – see paragraph (b)(7).

(b) Details of the building blocks

For the purposes of paragraph (a):

(1) for indexation of the regulatory asset base:

(i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and

(ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and

(2) the return on capital is calculated in accordance with clause 6.5.2; and

Note:

A statement of regulatory intent may be relevant to the calculation (See clause 6.5.4).

(3) the depreciation is calculated in accordance with clause 6.5.5; and

(4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3; and

Note:

A statement of regulatory intent may be relevant to the calculation (See clause 6.5.4).

(5) the revenue increments or decrements referred to in paragraph (a)(5) are those that arise as a result of the operation of an applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme* or *demand management incentive scheme* as referred to in clauses 6.5.8, 6.6.2 and 6.6.3; and

(6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*; and

(7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6.

6.5 Matters relevant to the making of building block determinations

6.5.1 Regulatory asset base

Nature of regulatory asset base

(a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the provider to provide *standard control services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

(b) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.

(c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *roll forward model*.

(d) The *AER* must develop and *publish* the first *roll forward model* within 6 months after the commencement of this clause, and there must be such a model available at all times after that date.

Contents of roll forward model

(e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:

(1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and

(2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

(3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

Other provisions relating to regulatory asset base

(f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.

6.5.2 Return on capital

Calculation of return on capital

(a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6.5.2) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

Weighted average cost of capital

(b) The rate of return for a *Distribution Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *distribution* business of the provider and must be calculated as a nominal post-tax *weighted average cost of capital* ("*WACC*") in accordance with the following formula:

$$\text{WACC} = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

$\mathbf{k_e}$ is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$r_f + \beta_e \times MRP$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

β_e is the equity beta; and

MRP is the market risk premium;

$\mathbf{k_d}$ is the return on debt and is calculated as:

$r_f + DRP$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the value of equity as a proportion of the value of equity and debt, which is 1 - D/V; and

D/V is the value of debt as a proportion of the value of equity and debt.

Meaning of nominal risk free rate

(c) The nominal risk free rate for a *regulatory control period* is (unless some different provision is made by a relevant *statement of regulatory intent)* the rate determined for that *regulatory control period* by the *AER* on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:

(1) the indicative mid rates published by the Reserve Bank of Australia; and

(2) a period of time which is either:

(i) a period ('the **agreed period'**) proposed by the relevant *Distribution Network Service Provider*, and agreed by the *AER* (such agreement is not to be unreasonably withheld); or

(ii) a period specified by the *AER*, and notified to the provider within a reasonable time prior to the commencement of that

period, if the period proposed by the provider is not agreed by the *AER* under subparagraph (i),

and, for the purposes of subparagraph (i):

(iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and

(iv) the *AER* must notify the *Distribution Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *building block proposal*.

(d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the *AER* must (unless some different provision is made by a relevant *statement of regulatory intent)* determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

(e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the *AER* as the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity equal to that used to derive the nominal risk free rate and a credit rating from a recognised credit rating agency.

6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t)\,(1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider,* operated the business of the *Distribution Network Service Provider,* such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ is the assumed utilisation of imputation credits.

For these purposes:

(1) the cost of debt must be based on that of a benchmark efficient *Distribution Network Service Provider*; and

(2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Distribution Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *distribution system* for that *regulatory year*.

6.5.4 Review of rate of return

(a) The *AER* must, in accordance with the *distribution consultation procedures* and this clause, carry out reviews of the matters referred to in paragraph (d).

(b) The first review is to be concluded by 1 May 2009 and further reviews are to follow at intervals not exceeding, in any case, five years with the first interval starting from 31 March 2009.

(c) The *AER* must, in consequence of a review, issue a statement (a *statement of regulatory intent*) adopting values, methods and credit rating levels for *Distribution Network Service Providers* or for specified classes of *Distribution Network Service Providers*.

(d) The following matters (and the method of their calculation) may form the subject of a review:

(1) the nominal risk free rate referred to in clause 6.5.2(c);

(2) the equity beta referred to in clause 6.5.2(b);

(3) the market risk premium referred to in clause 6.5.2(b);

(4) the maturity period and bond rates referred to in clause 6.5.2(d);

(5) the ratio of the value of debt to the value of equity and debt referred to in clause 6.5.2(b);

(6) credit rating levels referred to in clause 6.5.2(e);

(7) the assumed utilisation of imputation credits referred to in clause 6.5.3.

(e) In undertaking a review, the *AER* must have regard to:

(1) the need for the rate of return calculated for the purposes of clause 6.5.2(b) to be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds and the risk involved in providing *standard control services*; and

(2) the need for the return on debt to reflect the current cost of borrowings for comparable debt; and

(3) the need for the credit rating levels or the values attributable to, or the methods of calculating, the parameters referred to in paragraph (d) that vary according to the efficiency of the *Distribution Network Service Provider* to be based on a benchmark efficient *Distribution Network Service Provider*; and

(4) where the credit rating levels or the values attributable to, or the method of calculating, parameters referred to in paragraph (d) cannot be determined with certainty:

(i) the need to achieve an outcome that is consistent with the *national electricity objective*; and

(ii) the need for persuasive evidence before adopting a credit rating level or a value for, or a method of calculating, that parameter that differs from the credit rating level, value or the method of calculation that has previously been adopted for it.

(f) A *statement of regulatory intent* adopting a revised value, method, or credit rating level applies only for the purposes of a *building block proposal* submitted to the *AER* after publication of the *statement of regulatory intent*.

(g) A distribution determination to which a *statement of regulatory intent* is applicable must be consistent with the statement unless there is persuasive evidence justifying a departure, in the particular case, from a value, method or credit rating level set in the statement.

(h) In deciding whether a departure from a value, method or credit rating level set in a *statement of regulatory intent* is justified in a distribution determination, the *AER* must consider:

(1) the criteria on which the value, method or credit rating level was set in the *statement of regulatory intent* (the ***underlying criteria***); and

(2) whether, in the light of the underlying criteria, a material change in circumstances since the date of the statement, or any other relevant factor, now makes a value, method or credit rating level set in the statement inappropriate.

(i) If the *AER*, in making a distribution determination, in fact departs from a value, method or credit rating level set in a *statement of regulatory intent*, it must:

(1) state the substitute value, method or credit rating level in the determination; and

(2) demonstrate, in its reasons for the departure, that the departure is justified on the basis of the underlying criteria.

6.5.5 Depreciation

(a) The depreciation for each *regulatory year*:

(1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and

(2) must be calculated:

(i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider*'s *building block proposal*; or

(ii) to the extent the depreciation schedules nominated in the provider's *building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the *AER*.

(b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:

(1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;

(2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system;*

(3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined

for the same assets on a prospective basis in the distribution determination for that period.

6.5.6 Forecast operating expenditure

(a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *operating expenditure objectives*):

(1) meet or manage the expected demand for *standard control services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;

(3) maintain the quality, reliability and security of supply of *standard control services*;

(4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.

(b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:

(1) comply with the requirements of any relevant *regulatory information instrument*; and

(2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*; and

(3) include both:

(i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.

(c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *operating expenditure objectives*; and

(2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *operating expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(the *operating expenditure criteria*).

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal.*

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):

(1) the information included in or accompanying the *building block proposal*;

(2) submissions received in the course of consulting on the *building block proposal*;

(3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;

(4) benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;

(5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent the forecast of required operating expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.7 Forecast capital expenditure

(a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):

(1) meet or manage the expected demand for *standard control services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;

(3) maintain the quality, reliability and security of supply of *standard control services*;

(4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.

(b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:

(1) comply with the requirements of any relevant *regulatory information instrument*; and

(2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the *Distribution Network Service Provider*; and

(3) include both:

(i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and

(4) identify any forecast capital expenditure that is for an option that has satisfied the *regulatory test*.

(c) The *AER* must accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *capital expenditure objectives*; and

(2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *capital expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(the *capital expenditure criteria*)

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider.*

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors'*):

(1) the information included in or accompanying the *building block proposal*;

(2) submissions received in the course of consulting on the *building block proposal*;

(3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;

(4) benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;

(5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent the forecast of required capital expenditure of the *Distribution Network Service Provider* is referable to arrangements

with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.8 Efficiency benefit sharing scheme

(a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* a scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between *Distribution Network Service Providers* and *Distribution Network Users* of:

(1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and

(2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.

(b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to capital expenditure or *distribution losses*.

(c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:

(1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure and, if the scheme extends to capital expenditure, capital expenditure; and

(3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses; and

(4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and

(5) the possible effects of the scheme on incentives for the implementation of non-network alternatives.

(d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace an *efficiency benefit sharing scheme*.

6.5.9 The X factor

(a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.

(b) The X factor:

(1) must be set by the *AER* with regard to the *Distribution Network Service Provider*'s *total revenue requirement* for the *regulatory control period*; and

(2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and

(3) must conform with whichever of the following requirements is applicable:

(i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;

(ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue requirement* for the *regulatory control period* attributable to those services.

(c) There may be different X factors:

(1) for different regulatory years of the regulatory control period; and

(2) if there are 2 or more control mechanisms – for each control mechanism.

6.6 Adjustments after making of building block determination.

6.6.1 Cost pass through

(a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the *AER* to pass through to *Distribution Network Users* a *positive pass through amount*.

(b) If a *negative change event* occurs, the *AER* may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

Positive pass through

(c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:

(1) the details of the *positive change event*; and

(2) the date on which the *positive change event* occurred; and

(3) the *eligible pass through amount* in respect of that *positive change event*; and

(4) the *positive pass through amount* the provider proposes in relation to the *positive change event*; and

(5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and

(6) evidence:

(i) of the actual and likely increase in costs referred to in subparagraph (3); and

(ii) that such costs occur solely as a consequence of the *positive change event*; and

(7) such other information as may be required under any relevant *regulatory information instrument*.

(d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:

(1) the *approved pass through amount*; and

(2) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*,

taking into account the matters referred to in paragraph (j).

(e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:

(1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and

(2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Distribution Network User*s in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

(f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:

(1) the details of the *negative change event* concerned; and

(2) the date the *negative change event* occurred; and

(3) the costs in the provision of *standard control services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*; and

(4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Distribution Network User*s; and

(5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Distribution Network User*s in each *regulatory year* during the *regulatory control period*; and

(6) such other information as may be required under any relevant *regulatory information instrument*.

(g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the

provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:

(1) the *required pass through amount*; and

(2) taking into account the matters referred to in paragraph (j):

(i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the *negative pass through amount*); and

(ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*.

(h) A *Distribution Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

(i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Distribution Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* the *AER* considers appropriate.

Relevant factors

(j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the *AER* must take into account:

(1) the matters and proposals set out in any statement given to the *AER* by the provider under paragraph (c) or (f); and

(2) in the case of a *positive change event*, the increase in costs in the provision of *standard control services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*; and

(3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*; and

(4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*; and

(5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*; and

(6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER*'s opinion, is complementary to the *tax change event* concerned; and

(7) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *annual revenue requirement*; and

(8) any other factors the *AER* considers relevant.

Extension of time limits

(k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in clause 6.6.1(c) or clause 6.6.1(f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.

6.6.2 Service target performance incentive scheme

(a) The *AER* must, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or incentive schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.

(b) In developing and implementing a *service target performance incentive scheme*, the *AER*:

(1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and

(2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

Note:

A service target performance incentive scheme operates concurrently with any average or minimum service standards and guaranteed service level

schemes that apply to the Distribution Network Service Provider under jurisdictional electricity legislation.

(3) must take into account:

(i) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and

(iii) the past performance of the *distribution network*; and

(iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and

(v) the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels; and

(vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and

(vii) the possible effects of the scheme on incentives for the implementation of non-network alternatives.

(c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.

Note:

A Distribution Network Service Provider is not precluded from entering into a contract with a third party (such as a network support service provider) under which the benefits of a service target performance incentive scheme are passed on to the third party, or the third party is required to indemnify the provider for penalties to which the provider becomes liable under the scheme.

6.6.3 Demand management incentive scheme

(a) The *AER* may, in accordance with the *distribution consultation procedures*, develop and *publish* an incentive scheme or schemes (*demand management incentive scheme*) to provide incentives for *Distribution Network Service Providers* to implement efficient non-network alternatives or to manage the expected demand for *standard control services* in some other way.

(b) In developing and implementing a *demand management incentive scheme*, the *AER* must have regard to:

(1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(2) the effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a *Distribution Network Service Provider's* incentives to adopt or implement efficient non-network alternatives; and

(3) the extent the *Distribution Network Service Provider* is able to offer efficient pricing structures; and

(4) the possible interaction between a *demand management incentive scheme* and other incentive schemes; and

(5) the willingness of the customer or end user to pay for increases in costs resulting from implementation of the scheme.

(c) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace any scheme that is developed and *published* under this clause.

(d) Nothing in this clause limits the content of an *efficiency benefit sharing scheme*.

Part D Negotiated distribution services

6.7 Negotiated distribution services

6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

(1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*;

(2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;

(3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:

(i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or

(ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

(4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;

(5) the price for a *negotiated distribution service* must be the same for all *Distribution Network User*s unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network User*s or classes of *Distribution Network User*s;

(6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;

(7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated distribution service*;

(8) any access charges:

(A) in respect of providing *distribution network user access* to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c) should be based on the costs reasonably

incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs; and

(B) in respect of providing *transmission network user access* to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c) should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing that access and, in the case of compensation referred to in clauses 5.4A(h) - (j), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;

(9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause;

(10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;

(11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

6.7.2 Determination of terms and conditions of access for negotiated distribution services

(a) A *Distribution Network Service Provider* must comply with:

(1) the provider's *negotiating framework*; and

(2) the provider's *Negotiated Distribution Service Criteria*,

when the provider is negotiating the *terms and conditions of access* to *negotiated distribution services*.

(b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:

(1) rules 5.3 and 5.5, when negotiating for the provision of *connection services* and the associated *connection service* charges in respect of the provision of *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c);

(2) rules 5.3 and 5.4A, when negotiating for the provision of *connection* services and the associated *connection service* charges in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c);

(3) rule 5.5, when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and

(4) rule 5.4A, when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User* in respect of the provision of *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c).

6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7.4 Negotiated Distribution Service Criteria determination

(a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:

(1) by the provider in negotiating *terms and conditions of access* including:

(i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or

(ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and

(2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:

(i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or

(ii) any *access charges* that are to be paid to or by the provider.

(b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services

(a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated distribution service* from the provider, as to the *terms and conditions of access* for the provision of the service.

(b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:

(1) the applicable requirements of the relevant distribution determination; and

Note:

See clause 6.7.3.

(2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

(c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:

(1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a *negotiated distribution service*; and

(2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated distribution service*, including the cost information described in subparagraph (3); and

(3) a requirement for the provider:

(i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated distribution service*; and

(ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated distribution service* reflect those costs and/or the cost increment or decrement (as appropriate); and

(iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made; and

Note:

If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed maximum demand, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's load profile where a reduction or increase in maximum demand has been demonstrated.

(4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and

(5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and

(6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and

(7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and

(8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network User*s of the provision of the *negotiated distribution service*; and

(9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network User*s and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network User*s under the *Rules*; and

(10) a requirement that the *Distribution Network Service Provider publish* the results of negotiations on its website.

(d) Notwithstanding the foregoing, the negotiating framework must not be inconsistent with any of the requirements of:

(1) rules 5.3 and 5.5 insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c); and

(2) rules 5.3 and 5.4A insofar as the *negotiating framework* applies to *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c),

and any other relevant provisions of this Chapter 6 and, in the event of any inconsistency, those requirements prevail.

(e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6.7.6 Confidential information

(a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):

(1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and

(2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider*.

(b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):

(1) does not include *confidential information* provided to a *Service Applicant* by another person; and

(2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part E Regulatory proposal

6.8 Regulatory proposal

6.8.1 AER's framework and approach paper

(a) The *AER* must prepare and *publish* a document (a *framework and approach paper*) in anticipation of every distribution determination.

(b) The *framework and approach paper* should set out the *AER*'s likely approach (together with its reasons for the likely approach), in the forthcoming distribution determination, to:

(1) the classification of *distribution services* in accordance with Part B; and

(2) the application to the *Distribution Network Service Provider* of a *service target performance incentive scheme* or *schemes*; and

(3) the application to the *Distribution Network Service Provider* of an *efficiency benefit sharing scheme* or *schemes*; and

(4) the application to the *Distribution Network Service Provider* (if applicable) of a *demand management incentive scheme* or *schemes*; and

(5) any other matters on which the *AER* thinks fit to give an indication of its likely approach.

(c) The *framework and approach paper* must state the form (or forms) of the control mechanisms to be applied by the distribution determination and the *AER's* reasons for deciding on control mechanisms of the relevant form (or forms).

(ca) The *framework and approach paper* must include the *AER's* determination under clause 6.25(b) as to whether or not Part J of Chapter 6A is to be applied to determine the pricing of *transmission standard control services* provided by any *dual function assets* owned, controlled or operated by the *Distribution Network Service Provider*.

(d) A *framework and approach paper* is to be prepared in consultation with the relevant *Distribution Network Service Provider* and with other interested stakeholders.

(e) The *AER* should complete its *framework and approach paper* for a particular *distribution network* sufficiently in advance of the making of the relevant distribution determination to enable it to be of use to the *Distribution Network Service Provider* in preparing its *regulatory proposal*.

(f) If a distribution determination is currently in force, the *AER* must commence preparation of, and consultation on, the *framework and approach paper* for the distribution determination that is to supersede it at least 24 months before the end of the current *regulatory control period* and must complete preparation at least 19 months before the end of that *regulatory control period*.

(g) On completing its *framework and approach paper*, the *AER* must:

(1) give a copy to the *Distribution Network Service Provider*; and

(2) *publish* it.

(h) Subject to clause 6.12.3, a *framework and approach paper* is not binding on the *AER* or a *Distribution Network Service Provider*.

6.8.2 Submission of regulatory proposal

(a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit a *regulatory proposal* to the *AER* for *distribution services* provided by means of, or in connection with, the provider's *distribution system*.

(b) A *regulatory proposal* must be submitted:

(1) at least 13 months before the expiry of a distribution determination that applies to the service provider; or

(2) if no distribution determination applies to the service provider, within 3 months after being required to do so by the *AER*.

(c) A *regulatory proposal* must include (but need not be limited to) the following elements:

(1) a classification proposal:

(i) showing how the *distribution services* to be provided by the *Distribution Network Service Provider* should, in the provider's opinion, be classified under this Chapter; and

(ii) if the proposed classification differs from the classification suggested in the relevant *framework and approach paper* – including the reasons for the difference; and

(2) for *direct control services* classified under the proposal as *standard control services* – a *building block proposal*; and

(3) for *direct control services* classified under the proposal as *alternative control services* – a demonstration of the application of the control mechanism, as set out in the *framework and approach paper*, and the necessary supporting information; and

(4) for *direct control services* – indicative prices for each year of the *regulatory control period*; and

(5) for services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*; and

(6) an indication of the parts of the proposal (if any) the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground.

(d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.

(e) If more than one *distribution system* is owned, controlled or operated by a *Distribution Network Service Provider*, then, unless the *AER* otherwise determines, a separate *regulatory proposal* is to be submitted for each *distribution system*.

(f) If, at the commencement of this Chapter, different parts of the same *distribution system* were separately regulated, then, unless the *AER* otherwise determines, a separate *regulatory proposal* is to be submitted for each part as if it were a separate *distribution system*.

6.9 Preliminary examination and consultation

6.9.1 Preliminary examination

(a) If the *AER* considers that a *regulatory proposal* (or the accompanying information) does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the provider that it requires resubmission of the proposal.

(b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal* to be non-compliant.

6.9.2 Resubmission of proposal

(a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal* in an amended form that complies with the relevant requirements set out in the notice.

(b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal* to address the deficiencies identified in the notice.

6.9.3 Consultation

(a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted or resubmitted to it by the provider under this Part, together with:

(1) the *AER*'s proposed *Negotiated Distribution Service Criteria* for the provider; and

(2) an invitation for written submissions on the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria*,

after the *AER* decides that the *regulatory proposal* complies (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.

(b) The *AER* may *publish* an issues paper examining issues related to the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria,* at the same time as, or subsequent to, *publication* of the invitation referred to in paragraph (a)(2).

(c) Any person may make a written submission to the *AER* on the *regulatory proposal* or the proposed *Negotiated Distribution Service Criteria* within the time specified in the invitation referred to in paragraph (a)(2), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6.10 Draft distribution determination and further consultation

6.10.1 Making of draft distribution determination

Subject to rule 6.14(a), the *AER* must consider any written submissions made under rule 6.9 and must make a draft distribution determination in relation to the *Distribution Network Service Provider*.

6.10.2 Publication of draft determination and consultation

(a) The *AER* must *publish*:

(1) the draft distribution determination; and

(2) notice of the making of the draft distribution determination; and

(3) the *AER*'s reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated; and

(4) notice of a predetermination conference; and

(5) an invitation for written submissions on its draft distribution determination.

(b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(4) for the purpose of explaining the draft distribution determination and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.

(c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 30 *business days* after the making of the draft determination.

6.10.3 Submission of revised proposal

(a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 30 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* to the *AER*.

(b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required to address matters raised by the draft distribution determination or the *AER*'s reasons for it.

(c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

(d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a revised *regulatory proposal* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.

(e) The *AER* may, but need not, invite written submissions on the revised *regulatory proposal*.

6.11 Distribution determination

6.11.1 Making of distribution determination

Subject to rule 6.14(a), the *AER* must consider any submissions made on the draft distribution determination, or on any revised *regulatory proposal* submitted to it under clause 6.10.3, and must make a distribution determination in relation to the *Distribution Network Service Provider*.

6.11.2 Notice of distribution determination

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

(1) notice of the making of the distribution determination; and

(2) the distribution determination itself; and

(3) the *AER*'s reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

6.11.3 Commencement of distribution determination

(a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.

(b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:

(1) the previous distribution determination continues in force during the intervening period; and

(2) the previous *approved pricing proposal* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the later *regulatory control period*; and

(3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

6.12 Requirements relating to draft and final distribution determinations

6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the *AER* (*constituent decisions*):

(1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;

(2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the *AER* either approves or refuses to approve:

(i) the *annual revenue requirement* for the provider, as set out in the *building block proposal*, for each *regulatory year* of the regulatory *control period*; and

(ii) the commencement and length of the *regulatory control period* as proposed in the *building block proposal*;

(3) a decision in which the *AER* either:

(i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or

(ii) acting in accordance with clause 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;

(4) a decision in which the *AER* either:

(i) acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*; or

(ii) acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that

decision and an estimate of the total of the *Distribution Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

(5) a decision in relation to the rate of return on whether to apply or depart from a value, method or credit rating level set out in a *statement of regulatory intent* in accordance with clause 6.5.4;

(6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;

(7) a decision on the estimated cost of corporate income tax to the provider for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3 and, where relevant, a *statement of regulatory intent* under clause 6.5.4;

(8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);

(9) a decision on how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* is to apply to the *Distribution Network Service Provider*;

(10) a decision in which the *AER* decides other appropriate amounts, values or inputs;

(11) a decision on the control mechanism (including the X factor) for *standard control services* (to be in accordance with the relevant *framework and approach paper*);

(12) a decision on the control mechanism for *alternative control services* (to be in accordance with the relevant *framework and approach paper*);

(13) a decision on how compliance with a relevant control mechanism is to be demonstrated;

(14) a decision on the additional *pass through events* that are to apply for the *regulatory control period*;

(15) a decision on the *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control*

period (which may be the *negotiating framework* as proposed by the provider, some variant of it, or a framework substituted by the *AER*);

(16) a decision in which the *AER* decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;

(17) a decision on the procedures for assigning customers to *tariff classes*, or reassigning customers from one *tariff class* to another (including any applicable restrictions);

(17A) a decision on the approval of the proposed *pricing methodology* for *transmission standard control services* (if rule 6.26 applies);

(18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;

(19) a decision on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *Transmission Use of System* charges for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges.

6.12.2 Reasons for decisions

The reasons given by the *AER* for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

(1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*; and

(2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:

(i) whether those values have been taken or derived from the provider's current *building block proposal*; and

(ii) if not, the rationale for the adoption of those values; and

(3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and

(4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in this Chapter 6, for the purposes of the determination.

6.12.3 Extent of AER's discretion in making distribution determinations

(a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER*'s discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of a *regulatory proposal*.

(b) The classification of services must be as set out in the relevant *framework and approach paper* unless the *AER* considers that, in the light of the *Distribution Network Service Provider*'s *regulatory proposal* and the submissions received, there are good reasons for departing from the classification proposed in that paper.

(c) The control mechanisms must be as set out in the relevant *framework and approach paper*.

(d) The *AER* must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the provider's current *building block proposal*, if the *AER* is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.

(e) The *AER* must approve a proposed *regulatory control period* if the proposed period consists of 5 *regulatory years*.

(f) If the *AER* refuses to approve an amount or value referred to in clause 6.12.1, the substitute amount or value on which the distribution determination is based must be:

(1) determined on the basis of the current *regulatory proposal*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

(g) The *AER* must approve a proposed *negotiating framework* if the *AER* is satisfied that it adequately complies with the requirements of Part D.

(h) If the *AER* refuses to approve the proposed *negotiating framework*, the approved amended *negotiating framework* must be:

(1) determined on the basis of the current proposed *negotiating framework*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6.13 Revocation and substitution of distribution determination for wrong information or error

(a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the determination is affected by a material error or deficiency of one or more of the following kinds:

(1) a clerical mistake or an accidental slip or omission;

(2) a miscalculation or misdescription;

(3) a defect in form;

(4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.

(b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.

(c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct the relevant error or deficiency.

(d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

6.14 Miscellaneous

(a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.

(b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.

(c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6.9.3(a)(2) or 6.10.2(a)(5) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.

(d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.

(e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.

(f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F Cost Allocation

6.15 Cost allocation

6.15.1 Duty to comply with Cost Allocation Method

A *Distribution Network Service Provider* must comply with the *Cost Allocation Method* that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15.

6.15.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

(1) the detailed principles and policies used by a *Distribution Network Service Provider* to allocate costs between different categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;

(2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;

(3) only the following costs may be allocated to a particular category of *distribution services*:

(i) costs which are directly attributable to the provision of those services;

(ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:

(A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and

(B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;

(4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;

(5) the same cost must not be allocated more than once;

(6) the principles, policies and approach used to allocate costs must be consistent with the *Distribution Ring-Fencing Guidelines*;

(7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

Note

The Cost Allocation Guidelines are required by clause 6.15.3 to give effect to and be consistent with, the Cost Allocation Principles.

6.15.3 Cost Allocation Guidelines

(a) The *AER* must, in accordance with the *distribution consultation procedures*, make guidelines (the *Cost Allocation Guidelines*) relating to the preparation by a *Distribution Network Service Provider* of its *Cost Allocation Method*.

(b) The *Cost Allocation Guidelines*:

(1) must give effect to and be consistent with the *Cost Allocation Principles*; and

(2) may be amended by the *AER* from time to time in accordance with the *distribution consultation procedures*.

(c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:

(1) the format of a *Cost Allocation Method*; and

(2) the detailed information that is to be included in a *Cost Allocation Method*; and

(3) the categories of *distribution services* which are to be separately addressed in a *Cost Allocation Method*, such categories being determined by reference to the nature of those services, the persons to

whom those services are provided or such other factors as the *AER* considers appropriate; and

(4) the allocation methods which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Method*.

(d) The *AER* may, from time to time and in accordance with the *distribution consultation procedures*, amend or replace the *Cost Allocation Guidelines*.

(e) The *AER* must, in accordance with the *distribution consultation procedures,* develop and *publish* the first *Cost Allocation Guidelines* within 6 months after the commencement of these *Rules* and there must be *Cost Allocation Guidelines* available at all times after that date.

6.15.4 Cost Allocation Method

(a) Each *Distribution Network Service Provider* must submit to the *AER* for its approval a document setting out its proposed *Cost Allocation Method*:

(1) within 12 months after the commencement of these *Rules*; or

(2) in the case of an entity that becomes a *Distribution Network Service Provider* more than 6 months after the commencement of these *Rules*, within 6 months of being required to do so by the *AER*.

(b) The *Cost Allocation Method* proposed by a *Distribution Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.

(c) The *AER* may approve or refuse to approve a *Cost Allocation Method* submitted under paragraph (a).

(d) The *AER* must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Method* submitted to it under paragraph (a) within 6 months of its submission, failing which the *AER* will be taken to have approved it.

(e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Distribution Network Service Provider*, amend the *Cost Allocation Method* submitted to it, in which case the *Cost Allocation Method* as so amended will be taken to be approved by the *AER*.

(f) A *Distribution Network Service Provider* may, with the *AER*'s approval, amend its *Cost Allocation Method* from time to time but:

(1) the amendment:

(i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the *Cost Allocation Method* the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and

(ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the *AER* of its agreement; and

(2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.

(g) A *Distribution Network Service Provider* must amend its *Cost Allocation Method* where the amendment is required by the *AER* to take into account any change to the *Cost Allocation Guidelines,* but the amendment only comes into effect:

(1) on the date that the *AER* approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and

(2) subject to additional changes to the *Cost Allocation Method* (if any) the *AER* reasonably considers necessary or desirable as a result of the amendment and notifies to the *Distribution Network Service Provider* before the amendment takes effect.

(h) A *Distribution Network Service Provider* must maintain a current copy of its *Cost Allocation Method* on its website.

Part G Distribution consultation procedures

6.16 Distribution consultation procedures

(a) This rule 6.16 applies wherever the *AER* is required to comply with the *distribution consultation procedures*. For the avoidance of doubt, the *distribution consultation procedures* are separate from, and (where they are required to be complied with) apply to the exclusion of, the *Rules* consultation procedures under rule 8.9.

(b) If the *AER* is required to comply with the *distribution consultation procedures* in making, developing or amending any guidelines, models or schemes, or in reviewing any values or methods, it must *publish:*

(1) the proposed guideline, model, scheme, amendment or revised value or method; and

(2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, model, scheme or amendment is proposed to be made or developed or the value or method is required to be reviewed, and the reasons for the proposed guideline, model, scheme, amendment or revised value or method; and

(3) an invitation for written submissions on the proposed guideline, model, scheme, amendment or revised value or method.

(c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* is not required to consider any submission made pursuant to that invitation after this time period has expired.

(d) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, model, scheme, amendment or revised value or method as it considers appropriate.

(e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* must *publish*:

(1) its final decision on the guideline, model, scheme, amendment, value or method that sets out:

(i) the guideline, model, scheme, amendment or revised value or method (if any); and

(ii) the provision of the *Rules* under which or for the purposes of which the guideline, model, scheme or amendment is being made or developed or the value or method is being reviewed; and

(iii) the reasons for the guideline, model, scheme, amendment value or method; and

(2) notice of the making of the final decision on the guideline, model, scheme, amendment, value or method.

(f) Subject to paragraph (c), the *AER* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) must include:

(1) a summary of each issue raised in those submissions that the *AER* reasonably considers to be material; and

(2) the *AER*'s response to each such issue.

(g) The *AER* may extend the time within which it is required to publish its final decision if:

(1) the consultation involves questions of unusual complexity or difficulty; or

(2) the extension of time has become necessary because of circumstances beyond the *AER*'s control.

Part H Ring-Fencing Arrangements for Distribution Network Service Providers

6.17 Distribution Ring-Fencing Guidelines

6.17.1 Compliance with Distribution Ring-Fencing Guidelines

All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.

6.17.2 Development of Distribution Ring-Fencing Guidelines

(a) Guidelines may be developed by the *AER* for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdiction*s.

Note:

Clause 11.14.5 will have a bearing on the application of these guidelines in certain cases.

(b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:

(1) provisions defining the need for and extent of:

(i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and

(ii) the establishment and maintenance of consolidated and separate accounts for *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and

(iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and

(iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and

(v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and

(2) provisions allowing the AER to add to or to waive a Distribution Network Service Provider's obligations under the Distribution Ring-Fencing Guidelines.

(c) In developing or amending the *Distribution Ring-Fencing Guidelines* the *AER* must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.

(d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the *AER* must consult with *participating jurisdictions*, *Registered Participants*, *AEMO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures*.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

6.18.2 Pricing proposals

(a) A *Distribution Network Service Provider* must:

(1) submit to the *AER*, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the "initial *pricing proposal*") for the first *regulatory year* of the *regulatory control period*; and

(2) submit to the *AER*, at least 2 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an "annual *pricing proposal*') for the relevant *regulatory year*.

(b) A *pricing proposal* must:

(1) set out the *tariff classes* that are to apply for the relevant *regulatory year*; and

(2) set out the proposed tariffs for each *tariff class*; and

(3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates; and

(4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*; and

(5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur; and

(6) set out how charges incurred by the *Distribution Network Service Provider* for *transmission use of system services* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*; and

(7) demonstrate compliance with the *Rules* and any applicable distribution determination; and

(8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.

(c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider publish* the proposal.

6.18.3 Tariff classes

(a) A *pricing proposal* must define the *tariff classes* into which customers for *direct control services* are divided.

(b) Each customer for *direct control services* must be a member of 1 or more *tariff classes*.

(c) Separate *tariff classes* must be constituted for customers to whom *standard control services* are supplied and customers to whom *alternative control services* are supplied (but a customer for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).

(d) A *tariff class* must be constituted with regard to:

(1) the need to group customers together on an economically efficient basis; and

(2) the need to avoid unnecessary transaction costs.

6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging

(a) In formulating provisions of a distribution determination governing the assignment of customers to *tariff classes* or the re-assignment of customers from one *tariff class* to another, the *AER* must have regard to the following principles:

(1) customers should be assigned to *tariff classes* on the basis of one or more of the following factors:

(i) the nature and extent of their usage;

(ii) the nature of their *connection* to the *network*;

(iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a *regulatory obligation or requirement*;

(2) customers with a similar *connection* and usage profile should be treated on an equal basis;

(3) however, customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile;

(4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

Note:

If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.

(b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

6.18.5 Pricing principles

(a) For each *tariff class*, the revenue expected to be recovered should lie on or between:

(1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and

(2) a lower bound representing the avoidable cost of not serving those customers.

(b) A tariff, and if it consists of 2 or more *charging parameters*, each *charging parameter* for a *tariff class*:

(1) must take into account the long run marginal cost for the service or, in the case of a *charging parameter*, for the element of the service to which the *charging parameter* relates; and

(2) must be determined having regard to:

(i) transaction costs associated with the tariff or each *charging parameter*; and

(ii) whether customers of the relevant *tariff class* are able or likely to respond to price signals.

(c) If, however, as a result of the operation of paragraph (b), the *Distribution Network Service Provider* may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

6.18.6 Side constraints on tariffs for standard control services

(a) This clause applies only to *tariff classes* related to the provision of *standard control services*.

(b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed the corresponding expected weighted average revenue for the preceding *regulatory year* by more than the permissible percentage.

(c) The permissible percentage is the greater of the following:

(1) the CPI-X limitation on any increase in the *Distribution Network Service Provider*'s expected weighted average revenue between the two *regulatory year*s plus 2%;

Note:

The calculation is of the form (1 + CPI)(1 – X)(1 + 2%)

(2) CPI plus 2%.

Note:

The calculation is of the form (1 + CPI)(1 + 2%)

(d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:

(1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;

(2) the recovery of revenue to accommodate pass through of charges for *transmission use of system services* to customers.

(e) This clause does not, however, limit the extent a tariff for customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.

6.18.7 Recovery of charges for transmission use of system services

(a) A *pricing proposal* must provide for tariffs designed to pass on to customers the charges to be incurred by the *Distribution Network Service Provider* for *transmission use of system services*.

(b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of the *transmission use of system* charges for the relevant *regulatory year* adjusted for over or under recovery in the previous *regulatory year*.

(c) The extent of the over or under recovery is the difference between:

(1) the amount actually paid by the *Distribution Network Service Provider* by way of *transmission use of system* charges in the previous *regulatory year*; and

(2) the amount passed on to customers by way of *transmission use of system* charges by the *Distribution Network Service Provider* in the previous *regulatory year*.

6.18.8 Approval of pricing proposal

(a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:

(1) the proposal complies with this Part and any applicable distribution determination; and

(2) all forecasts associated with the proposal are reasonable.

(b) If the *AER* determines that a *pricing proposal* is deficient:

(1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or

(2) the *AER* may itself make the amendments necessary to correct the deficiencies.

(c) If the service provider fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part and any applicable distribution determination.

(d) An *approved pricing proposal* takes effect:

(1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and

(2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

Note:

The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).

6.18.9 Publication of information about tariffs and tariff classes

(a) A *Distribution Network Service Provider* must maintain on its website:

(1) a statement of the provider's *tariff classes* and the tariffs applicable to each class; and

(2) for each tariff – the *charging parameters* and the elements of the service to which each *charging parameter* relates; and

(3) a statement of expected price trends (to be updated for each *regulatory year*) giving an indication of how the *Distribution Network Service Provider* expects prices to change over the *regulatory control period* and the reasons for the expected changes.

(b) The information for a particular *regulatory year* must, if practicable, be posted on the website 20 *business days* before the commencement of the relevant *regulatory year* and, if that is not practicable, as soon as practicable thereafter.

6.19. Data Required for Distribution Service Pricing

6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

6.19.2 Confidentiality of distribution network pricing information

(a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information.

(b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual customer.

Part J Billing and Settlements

6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

6.20.1 Billing for distribution services

(a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:

(1) *Embedded Generators*:

(i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and

(ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.

(2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

(i) demand-based prices to the *Distribution Customer*'s metered or agreed half-hourly demand;

(ii) energy-based prices to the *Distribution Customer*'s metered or agreed energy;

(iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;

(iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;

(v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.

(b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).

(c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).

(d) *Distribution Network Service Providers* must:

(1) calculate *transmission service charges* and *distribution service charges* for all *connection points* in their *distribution network*; and

(2) pay to *Transmission Network Service Providers* the *transmission service charges* incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.

(e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:

(1) *Embedded Generators* that are *Market Generators*; and

(2) *Market Customer*; and

(3) *Second-Tier Customers*;

must be calculated by the *Distribution Network Service Provider* from:

(1) *settlements ready data* obtained from *AEMO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and

(2) *energy data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from *AEMO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 5, 6 or 7 *metering installation*.

(f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:

(1) *Embedded Generators* that are not *Market Generators*; and

(2) *Non-Registered Customers*; and

(3) *franchise customers*,

must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.

(g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.

(h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.

(i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

6.20.2 Minimum information to be provided in distribution network service bills

The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:

(1) the *network coupling point* identifier; and

(2) the dates on which the billing period starts and ends; and

(3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and

(4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.

6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

Part K Prudential requirements, capital contributions and prepayments

6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution Network Service Providers* from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

6.21.1 Prudential requirements for distribution network service

(a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.

(b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.

(c) The *connection agreement* may include one or more of the following provisions:

(1) the conditions under which and the time frame within which other *Distribution Network User*s who use that part of the *distribution network* contribute to refunding all or part of the payments;

(2) the conditions under which financial arrangements may be terminated; and

(3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.

(d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:

(1) financial capital contributions;

(2) non-cash contributions;

(3) *distribution service* charge prepayments;

(4) guaranteed minimum *distribution service charges* for an agreed period;

(5) guaranteed minimum *distribution service* quantities for an agreed period;

(6) provision for financial guarantees for *distribution service charges*.

6.21.2 Capital contributions, prepayments and financial guarantees

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

(1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network User*s; and

(2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the

provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and

(3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

6.21.3 Treatment of past prepayments and capital contributions

(a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.

(b) Where contractual arrangements referred to in clause 6.22.2(a) are not in place, past *distribution service* prepayments or capital contributions may be incorporated in the capital structure of the *Distribution Network Service Provider*'s business.

(c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

Part L Dispute resolution

6.22 Dispute Resolution

6.22.1 Dispute Resolution by the AER

(a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.

(b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.

(c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.5(f) or clause 5.5(h) is an access dispute for the purposes of Part 10 of the Law.

6.22.2 Determination of dispute

(a) In determining an access dispute about *terms and conditions of access* to a *direct control service*, the *AER* must apply:

(1) in relation to price, the *Distribution Network Service Provider's approved pricing proposal* or, in respect of the *Distribution Network Service Provider's transmission standard control services* in respect of which the AER has made a determination under clause 6.25(b) that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26, the *Distribution Network Service Provider's* approved *pricing methodology*;

(2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules* and any other *applicable regulatory instrument*; and

(3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*.

(b) In determining an access dispute about the *terms and conditions of access* to a *direct control service*, the *AER* may:

(1) have regard to other matters the *AER* considers relevant; and

(2) hear evidence or receive submissions from *AEMO* about *power system security* and from *Distribution Network User*s who may be adversely affected.

Note:

Section 130 of the Law requires the AER, in making an access determination, to give effect to a network revenue or pricing determination applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.

(c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the *AER* must apply:

(1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and

(2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and

(3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

(4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.

(d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the *AER* may:

(1) have regard to other matters the *AER* considers relevant; and

(2) hear evidence or receive submissions from *AEMO* and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider*'s *negotiating framework*.

(e) In determining an access dispute about *access charges*, or involving *access charges*, the *AER* must give effect to the following principle:

Access charges should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

6.22.3 Termination of access dispute without access determination

(a) If the *AER* considers that an access dispute could be effectively resolved by some means other than an access determination, the *AER* may give the parties to the dispute notice of the alternative means of resolving the dispute.

Example:

The AER might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.

(b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note:

It follows that the AER may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

Part M Separate disclosure of transmission and distribution charges

6.23 Separate disclosure of transmission and distribution charges

(a) A *Distribution Customer*:

(1) with a *load* greater than 10MW or 40GWh per annum; or

(2) with *metering* equipment capable of capturing relevant *transmission* and *distribution system* usage data,

may make a request (a ***TUOS/DUOS disclosure request***) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a ***TUOS/DUOS disclosure statement***) identifying the separate components of the *transmission use of system* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.

(b) Within 10 *business days* of receipt of a *TUOS/DUOS disclosure request*, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the *TUOS/DUOS disclosure statement*. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.

(c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested *TUOS/DUOS disclosure statement*, the *Distribution Network Service Provider* must prepare the statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The *TUOS/DUOS disclosure statement* must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *transmission use of system* charges to the *Distribution Customer* for electricity supplied to its *connection points*. The information must be sufficient to allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

(d) The *TUOS/DUOS disclosure statement* must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.

(e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately

identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.

(f) Each *Distribution Network Service Provider* must publish information annually disclosing the *transmission use of system* and *distribution use of system* charges for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the *AER*.

Part N Dual Function Assets

6.24 Dual Function Assets

6.24.1 Application of this Part

This Part applies to *Distribution Network Service Providers* which own, control or operate both a *distribution system* and a *dual function asset*.

6.24.2 Dual Function Assets

Subject to rule 6.26, for the purposes of Chapters 6 and 6A:

(a) any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* is deemed to be a *dual function asset*;

(b) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider*'s *dual function assets* that, but for this Part, would be a *prescribed transmission service* for the purposes of Chapter 6A is deemed to be a *standard control service*;

(c) any service that is provided by a *Distribution Network Service Provider* by means of, or in connection with, the *Distribution Network Service Provider*'s *dual function assets* that, but for this Part, would be a *negotiated transmission service* under Chapter 6A is deemed to be a *negotiated distribution service*; and

(d) references to *prescribed transmission services* do not include a service provided by means of, or in connection with, a *dual function asset*.

6.25 AER determination of applicable pricing regime for Dual Function Assets

(a) A *Distribution Network Service Provider* which owns, controls or operates *dual function assets* must advise the *AER* at least 24 months prior to the end

of the current *regulatory control period* of the value of that *Distribution Network Service Provider's dual function assets* which provide *standard control services* that would be *prescribed transmission services* were it not for the operation of clause 6.24.2 (referred to as *transmission standard control services*). The value to be advised is the value ascribed to the relevant *dual function assets* in the relevant *Distribution Network Service Provider's* regulatory asset base as at the start of the *regulatory year* which commences 24 months prior to the end of the current *regulatory control period*.

(b) The *AER* must review the information provided under paragraph (a) and determine, following consultation with the relevant *Distribution Network Service* Provider and with other interested parties in the course of preparing the *framework and approach paper* for that *Distribution Network Service Provider*, whether the value of that *Distribution Network Service Provider's dual function assets* which provide *transmission standard control services* comprise such a material proportion of that *Distribution Network Service Provider's* regulatory asset base that pricing in respect of those services should be regulated under Part J of Chapter 6A through the application of rule 6.26.

(c) In making its determination under paragraph (b) the *AER* must consider:

(1) whether regulating the pricing of the *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets*:

(i) under Part I of Chapter 6 as though they were *prescribed distribution services*; rather than

(ii) under Part J of Chapter 6A as though they were *prescribed transmission services*,

will result in materially different prices for *Distribution Customers* (including those connected directly to the relevant *dual function assets* and those connected to other *distribution networks*);

(2) whether the materiality of the different prices is likely to impact on future consumption, production and investment decisions by actual or potential *Network Users*; and

(3) any other matter that the *AER* considers relevant.

(d) The *AER*'s determination under paragraph (b) must be notified to the relevant *Distribution Network Service Provider* in the *framework and approach paper* applicable to that *Distribution Network Service Provider*.

6.26 Division of Distribution Network Service Provider's revenue

(a) This rule 6.26 applies if the *AER* has determined under rule 6.25(b) that pricing in respect of *transmission standard control services* provided by a *Distribution Network Service Provider's dual function assets* should be regulated under Part J of Chapter 6A.

(b) The *AER* must, for the purposes of the distribution determination for the relevant *Distribution Network Service Provider*, divide the revenue calculated under Part C of Chapter 6 into the following two portions:

(1) a portion relevant to the *Distribution Network Service Provider's transmission standard control services* provided by its *dual function assets*. This portion is defined as its *transmission standard control service revenue*; and

(2) a portion relevant to the other *standard control services* provided by the *Distribution Network Service Provider*. This portion is defined as its *distribution standard control service revenue*,

based on the *Distribution Network Service Provider*'s approved *Cost Allocation Method*.

(c) The relevant *Distribution Network Service Provider* must submit a proposed *pricing methodology* to the *AER* in respect of its *transmission standard control service revenue* as if it were a *Transmission Network Service Provider* as part of its regulatory proposal under Chapter 6, and Part E of Chapter 6A applies in respect of that *pricing methodology* (with the necessary changes).

(d) The *AER* and the relevant *Distribution Network Service Provider* must apply and comply with all aspects of Part J of Chapter 6A instead of, and to the exclusion of, Parts I, J and K of Chapter 6 in respect of the *dual function assets* which provide *transmission standard control services*, subject to the following:

(1) for the purposes of Part J of Chapter 6A:

(i) the *dual function assets* are relevantly deemed to be *transmission network* assets which provide *prescribed transmission services*;

(ii) the *Distribution Network Service Provider* which owns, controls or operates the relevant *dual function assets* is relevantly deemed to be a *Transmission Network Service Provider*;

(2) the *maximum allowed revenue* referred to in clause 6A.22.1 is taken to be the *transmission standard control service revenue*;

(3) the reference in clause 6A.22.1(1) to clause 6A.3.2 is taken to be a reference to rules 6.6 and 6.13;

(4) references to "*transmission determination*" are to be read as references to the relevant "distribution determination", with the *AER* being required to include in the distribution determination a decision to approve a proposed *pricing methodology* in relation to the *transmission standard control services* provided by the relevant *dual function assets*; and

(5) if there is no previous method to establish prices under clause 6A.24.3(b)(3), the relevant *Distribution Network Service Provider* must apply the *pricing methodology* of the largest *Transmission Network Service Provider* operating in the *participating jurisdiction* in which that *Distribution Network Service Provider* operates the relevant *dual function assets*.

(e) The pricing rules in Part I of Chapter 6 are to be applied to the *Distribution Network Service Provider's distribution standard control service revenue*.

Schedule 6.1 Contents of building block proposals

S6.1.1 Information and matters relating to capital expenditure

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

(1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:

(i) asset class (eg. *distribution lines*, *substations* etc); or

(ii) category driver (eg. *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, business support etc),

and identifies, in respect of proposed material assets:

(iii) the location of the proposed asset; and

(iv) the anticipated or known cost of the proposed asset; and

(v) the categories of *distribution services* which are to be provided by the proposed asset;

(2) the method used for developing the capital expenditure forecast;

(3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;

(4) the key assumptions that underlie the capital expenditure forecast;

(5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;

(6) capital expenditure for each of the past *regulatory year*s of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory year*s of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast;

(7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

S6.1.2 Information and matters relating to operating expenditure

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

(1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:

(i) particular programs; or

(ii) types of operating expenditure (eg. maintenance, payroll, materials etc),

and identifies in respect of each such category:

(iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and

(iv) the categories of *distribution services* to which that forecast expenditure relates;

(2) the method used for developing the operating expenditure forecast;

(3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;

(4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;

(5) the key assumptions that underlie the operating expenditure forecast;

(6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;

(7) operating expenditure for each of the past *regulatory year*s of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory year*s of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;

(8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6.1.3 Additional information and matters

A *building block proposal* must contain at least the following additional information and matters:

(1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;

(2) a proposed pass through clause with a proposal as to the events that should be defined as *pass through events*;

(3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *efficiency benefit sharing scheme* should apply for the relevant *regulatory control period*;

(4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *service target performance incentive scheme* should apply for the relevant *regulatory control period*;

(5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *demand management incentive scheme* (if applicable) should apply for the relevant *regulatory control period*;

(6) the provider's calculation of revenues or prices for the purposes of the control mechanism proposed by the provider together with:

(i) details of all amounts, values and inputs (including X factors) relevant to the calculation; and

(ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and

(iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the *Rules*;

(7) the provider's calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 of the *Rules*, together with:

(i) details of all amounts, values and other inputs used by the provider for that purpose; and

(ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6 of the *Rules*; and

(iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);

(8) the commencement and length of the period nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.2(c)(2) of the *Rules*;

(9) the provider's calculation of the proposed rate of return, including any proposed departure from the values, methods or credit rating levels set out in an applicable *statement of regulatory intent*;

(10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;

(11) the provider's estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;

(12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 of the *Rules*, which categorise the relevant assets for these purposes by reference to well accepted categories such as:

(i) asset class (eg *distribution lines* and *substation*s); or

(ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),

together with:

(iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules; and

(iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) of the *Rules*; and

(v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);

(13) the commencement and length of the *regulatory control period* proposed by the *Distribution Network Service Provider*.

Schedule 6.2 Regulatory Asset Base

S6.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) Application of this clause

This clause S6.2.1

(1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and

(2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

(b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

(1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	*Distribution Network Service Provider*	Regulatory Asset Base ($m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars)

Jurisdiction	*Distribution Network Service Provider*	Regulatory Asset Base ($m)
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
Queensland	ENERGEX	4,308.1 (as at 1 July 2005 in July 2005 dollars)
	Ergon Energy	4,198.2 (as at 1 July 2005 in July 2005 dollars) but, if the Queensland Competition Authority nominates a different amount in writing to the *AER*, the regulatory asset base is the amount so nominated.
South Australia	ETSA Utilities	2,466 (as at 1 July 2005 in December 2004 dollars)
Tasmania	Aurora Energy	981.108 (as at 1 January 2008 in July 2006 dollars)
Victoria	AGL Electricity	578.4 (as at 1 January 2006 in July 2004 dollars)
	Citipower	990.9 (as at 1 January 2006 in July 2004 dollars)
	Powercor	1,626.5 (as at 1 January 2006 in July 2004 dollars)
	SP AusNet	1,307.2 (as at 1 January 2006 in July 2004 dollars)
	United Energy	1,220.3 (as at 1 January 2006 in July 2004 dollars)

(2) The values in the table above are to be adjusted for the difference between:

(i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) Other distribution systems

(1) This paragraph (d) applies to a *distribution system* not referred to in paragraphs (c) when *standard control services* that are provided by means of, or in connection with, that system are to be regulated under a *building block determination.*

(2) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Distribution Network Service Provider* is the prudent and efficient value of the assets that are used by the provider to provide those *standard control services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6.2.2.

(3) The value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) Method of adjustment of value of regulatory asset base

Except as otherwise provided in paragraph (c) or (d), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the '**previous control period**') as follows:

(1) The previous value of the regulatory asset base must be increased by the amount of all capital expenditure incurred during the previous control period.

(2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER*

for any part of the previous control period for which actual capital expenditure is not available.

(3) The previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard control services* in accordance with the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*.

(5) The previous value of the regulatory asset base must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.

(6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.

(7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.

(8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:

(i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and

(ii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

(i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or

(ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period.*

(f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the portion of the value of the asset properly allocated, or formerly properly allocated, to *standard control services* in accordance with the principles and policies set out in the *Cost Allocation Method* for the relevant *Distribution Network Service Provider*. The value of the relevant asset is taken to be its value as shown in independently audited and published accounts.

S6.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6.2.1(d)(2), the *AER* must have regard to the following:

(1) the need to provide a reasonable opportunity for the relevant *Distribution Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;

(2) the need to provide effective incentives to the provider to promote economic efficiency in the provision of *standard control services*;

(3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory test*;

(4) whether the provider undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *standard control services* to be provided as a consequence of that capital expenditure;

(5) the desirability of minimising investment uncertainty for the provider;

(6) the need to provide incentives to the provider to avoid undertaking inefficient capital expenditure;

(7) the value of the relevant asset as shown in independently audited and published accounts.

In determining the prudency or efficiency of capital expenditure the *AER* must only take into account information and analysis that the provider could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

(a) Application of this clause

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6.5.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause.

(c) Method of adjustment of value of regulatory asset base

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

(1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) (as the case may be).

(2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider*'s *annual revenue requirement* for the previous year.

(3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.

(4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) Allowance for working capital

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.

CHAPTER 6A

6A. Economic Regulation of Transmission Services

Part A - Introduction

6A.1 Introduction to Chapter 6A

6A.1.1 Economic regulation of transmission services generally

(a) Part B of this Chapter 6A states the general obligation of the *AER* to make *transmission determinations* for *Transmission Network Service Provider*s in respect of:

(1) *prescribed transmission services*; and

(2) *negotiated transmission services*.

(b) Part C of this Chapter 6A regulates the revenues that may be earned by *Transmission Network Service Providers* from the provision by them of *transmission services* that are the subject of *transmission determinations*.

(c) Part D of this Chapter 6A regulates the *terms and conditions of access* to be applied (including the prices that may be charged) by *Transmission Network Service Provider*s for the provision by them of *negotiated transmission services*.

(d) Part E of this Chapter 6A sets out the procedure that applies for the purposes of the *AER* making a *transmission determination*.

(d) Part F of this Chapter 6A contains provisions regarding the disclosure, use and protection of information.

(e) Part G of this Chapter 6A contains provisions regarding cost allocation.

(f) Part H of this Chapter 6A contains provisions regarding the *transmission consultation procedures*.

(g) Part I of this Chapter 6A contains provisions regarding *Transmission Ring-Fencing Guidelines.*

(h) Part J of this Chapter 6A regulates the prices that may be charged by *Transmission Network Service Providers* for the provision of *prescribed transmission services* and establishes principles to be applied by providers in setting prices that allow those providers to earn the whole of the *aggregate annual revenue requirement*.

(i) Part K of this Chapter 6A provides for a *commercial arbitrator* to be appointed to resolve *transmission services access disputes* in relation to the *terms and conditions of access* for the provision of *negotiated transmission services* and for *prescribed transmission services*.

(j) Other *transmission services* provided by *Transmission Network Service Providers* ('*non-regulated transmission* services') are not subject to regulation under this Chapter 6A.

(k) Services provided by *dual function assets* are not subject to regulation under this Chapter 6A except to the extent provided in Part N of Chapter 6.

6A.1.2 Meaning of terms and conditions of access for transmission services

For the purposes of the economic regulation of *prescribed transmission services* and *negotiated transmission services*, the *terms and conditions of access*:

(a) in relation to *negotiated transmission services*, are:

(1) the price of those services (including, for services provided under rule 5.4A, *access charges*); and

(2) other terms and conditions for the provision of those *negotiated transmission services*,

under Chapters 4, 5 and this Chapter 6A of the *Rules*; and

(b) in relation to *prescribed transmission services*, are:

(1) the price of those services as determined under the *pricing methodology* of the relevant *Transmission Network Service Provider;* and

(2) other terms and conditions for the provision of those *prescribed transmission services*,

under Chapters 4, 5 and this Chapter 6A of the *Rules.*

6A.1.3 Access to prescribed and negotiated transmission services

Subject to and in accordance with the *Rules*:

(1) a person who is an existing or intending *Registered Participant*, or a person who is eligible to become a *Registered Participant* ('a *Service Applicant*') may apply to a *Transmission Network Service Provider* for provision of *prescribed transmission services* or *negotiated transmission services*.

(2) a *Transmission Network Service Provider* must provide *prescribed transmission services* or *negotiated transmission services* (as the case may be) on *terms and conditions of access* that are consistent with the requirements of Chapters 4, 5 and this Chapter 6A of the *Rules*.

(3) a *Transmission Network Service Provider* or a person who is provided *prescribed transmission services* or *negotiated transmission services* (whether the person is provided those services under an agreement, as a result of a determination of a *commercial arbitrator* or otherwise under the *Rules*) must not engage in conduct for the purpose of preventing or hindering access to those services.

6A.1.4 National regulatory arrangements

(a) The *AER* is, in accordance with this Chapter 6A, responsible for the economic regulation of *prescribed transmission services* provided by *Transmission Network Service Provider*s by means of, or in connection with, *transmission systems* that form part of the *national grid*.

(b) Subject to any contrary determination by the *AER*, those parts of a *transmission network* operating at nominal *voltages* between 66kV and 220kV that:

(1) do not operate in parallel to; and

(2) do not provide support to,

the higher *voltage transmission network* may be deemed by the relevant *Transmission Network Service Provider* to be subject to the regulatory arrangements for *distribution service* pricing set out in Chapter 6.

6A.1.5 Application of Chapter 6A to Market Network Service Providers

(a) Notwithstanding anything contained in this Chapter 6A:

(1) Parts B, C, D and J do not regulate the revenues that may be earned by *Market Network Service Providers* from, or the prices that may be charged by *Market Network Service Providers* for, the provision by them of *market network service*s; and

(2) Part E does not apply to *Market Network Service Providers*.

(b) Part D of this Chapter 6A does not regulate the terms and conditions of access for provision by *Transmission Network Service Provider*s of *network services* provided to:

(1) a *Market Network Service Provider*; or

(2) another *Network Service Provider* for electricity delivered to a *Market Network Service Provider* through the *network* of the other *Network Service Provider* (except for any such electricity which is ultimately consumed within the other *Network Service Provider's network*).

(c) Charges for the *network services* referred to in paragraph (b) are governed by the applicable provisions of rule 5.4A.

(d) Part K of this Chapter 6A does not apply to disputes relating to the terms and conditions of access for *network services* referred to under this clause 6A.1.5.

6A.1.6 Application of Chapter 6A to AEMO and declared transmission system operators

(a) This Chapter 6A applies to *AEMO* in respect of the provision of *shared transmission services* by means of, or in connection with, a *declared shared network* subject to the exclusions, qualifications and modifications set out in Schedule 6A.4.

(b) This Chapter 6A does not apply to *AEMO* as provider of *electricity network services* in any other capacity.

(c) This Chapter 6A applies to *declared transmission system operators* subject to the exclusions, qualifications and modifications set out in Schedule 6A.4 that expressly apply to them.

Part B - Transmission Determinations Generally

6A.2 Transmission determinations

6A.2.1 Duty of *AER* to make transmission determinations

The *AER* must make *transmission determinations* for *Transmission Network Service Provider*s in accordance with this Chapter 6A in respect of:

(1) *prescribed transmission services*; and

(2) *negotiated transmission services*.

6A.2.2 Components of transmission determinations

A *transmission determination* for a *Transmission Network Service Provider* consists of:

(1) a *revenue determination* for the provider in respect of the provision by the provider of *prescribed transmission services*;

(2) a determination relating to the provider's *negotiating framework*;

(3) a determination that specifies the *Negotiated Transmission Service Criteria* that apply to the provider; and

(4) a determination that specifies the *pricing methodology* that applies to the provider.

Part C - Regulation of Revenue - Prescribed Transmission Services

6A.3 Allowed revenue from prescribed transmission services

6A.3.1 Allowed revenue for regulatory year

The revenue that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is the *maximum allowed revenue* subject to any adjustments referred to in clause 6A.3.2, and is to be determined in accordance with:

(1) the *revenue determination* forming part of the applicable *transmission determination*; and

(2) the provisions of this Part C.

6A.3.2 Adjustment of maximum allowed revenue

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of a *regulatory control period* from the provision of *prescribed transmission services* is subject to adjustment in accordance with rules 6A.7, 6A.8 or 6A.15.

6A.4 Revenue determinations

6A.4.1 Introduction

(a) The procedure for making a *revenue determination* for a *Transmission Network Service Provider* is contained in Part E of this Chapter 6A, and involves the submission to the *AER* of a *Revenue Proposal* by the provider.

(b) Such a *Revenue Proposal* must comply with the requirements of this Chapter 6A, and in particular must:

(1) be prepared using the *post-tax revenue model* referred to in rule 6A.5; and

(2) comply with the requirements of the *submission guidelines* referred to in clause 6A.10.2.

6A.4.2 Contents of revenue determination

(a) A *revenue determination* for a *Transmission Network Service Provider* is to specify, for a *regulatory control period*, the following matters:

(1) the amount of the estimated *total revenue cap* for the *regulatory control period* or the method of calculating that amount;

(2) the *annual building block revenue requirement* for each *regulatory year* of the *regulatory control period;*

(3) the amount of the *maximum allowed revenue* for each *regulatory year* of the *regulatory control period* or the method of calculating that amount;

(4) appropriate methodologies for the indexation of the regulatory asset base;

(5) the values that are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the provider of any *service target performance incentive scheme* that applies in respect of the *regulatory control period*;

(6) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the provider of any *efficiency benefit sharing scheme* that applies in respect of the *regulatory control period*;

(7) the commencement and length of the *regulatory control period*; and

(8) such amounts, values or inputs as have been used by the *AER* in place of those referred to in clause 6A.10.2(b)(9).

(b) Unless otherwise determined by the *AER*:

(1) the *total revenue cap* may not relate to more than one *transmission system* that is owned, controlled or operated by a *Transmission Network Service Provider*; and

(2) there is to be a separate *total revenue cap* for each such *transmission system*.

(c) A *regulatory control period* in respect of a *Transmission Network Service Provider* must be not less than 5 *regulatory year*s.

6A.5 Post-tax revenue model

6A.5.1 Introduction

(a) The process of preparing a *revenue determination* for a *Transmission Network Service Provider* involves the submission of a *Revenue Proposal* to the *AER* by the provider under clause 6A.10.1. The provider is required to prepare the *Revenue Proposal* using a *post-tax revenue model* in relation to that proposal, in accordance with the requirements of this Chapter 6A.

(b) The principal purpose of the *post-tax revenue model* is to calculate the *maximum allowed revenue* under the *revenue determination*.

(c) The *post-tax revenue model*, together with the *Revenue Proposal,* form the basis on which the *AER* assesses a *Revenue Proposal* and makes a *revenue determination*.

6A.5.2 Preparation, publication and amendment of post-tax revenue model

(a) The *AER* must, in accordance with the *transmission consultation procedures*, prepare and *publish* a *post-tax revenue model*.

(b) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *post-tax revenue model.*

(c) The *AER* must develop and *publish* the first *post-tax revenue model* by 28 September 2007, and there must be such a model in force at all times after that date.

6A.5.3 Contents of post-tax revenue model

(a) The *post-tax revenue model* must set out the manner in which the following matters, referable only to the provision of *prescribed transmission services*, are to be calculated in respect of a *Transmission Network Service Provider* for a *regulatory control period*:

(1) the *total revenue cap* for the provider for the period;

(2) the *maximum allowed revenue* for the provider for each *regulatory year* of the period; and

(3) the *annual building block revenue requirement* for the provider for each *regulatory year*, determined in accordance with clause 6A.5.4.

(b) The *post-tax revenue model* must specify:

(1) a methodology that the *AER* determines is likely to result in the best estimates of expected inflation;

(2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6A.5.4;

(3) the manner (if any) in which working capital is to be treated;

(4) the manner in which the estimated cost of corporate income tax is to be calculated; and

(5) the CPI - X methodology that is to be applied in escalating the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) of a *regulatory control period*.

(c) The *post-tax revenue model* must be such that:

(1) the net present value of the expected *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period* is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year*;

(2) the *maximum allowed revenue* for the provider for the first *regulatory year* is expressed as a dollar amount;

(3) the *maximum allowed revenue* for the provider for each *regulatory year* (other than the first *regulatory year*) is calculated by escalating the *maximum allowed revenue* for the provider for the previous *regulatory year* using a CPI - X methodology; and

(4) the *total revenue cap* for the provider for a *regulatory control period* is calculated as the sum of the *maximum allowed revenues* for the provider for each *regulatory year*.

(d) For the purposes of this clause 6A.5.3, the X factor is that determined in accordance with clause 6A.6.8.

6A.5.4 Building blocks approach

(a) **Building blocks generally**

The *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* must be determined using a building blocks approach, under which the building blocks are:

(1) indexation of the regulatory asset base - see paragraph (b)(1);

(2) a return on capital for that year - see paragraph (b)(2);

(3) the depreciation for that year - see paragraph (b)(3);

(4) the estimated cost of corporate income tax of the provider for that year - see paragraph (b)(4);

(5) certain revenue increments or decrements for that year arising from the *efficiency benefit sharing scheme* - see paragraph (b)(5);

(6) the forecast operating expenditure accepted or substituted by the *AER* for that year – see paragraph (b)(6); and

(7) compensation for other risks - see paragraph (b)(7).

(b) **Details about the building blocks**

For the purposes of paragraph (a):

(1) for indexation of the regulatory asset base:

(i) the regulatory asset base is calculated in accordance with clause 6A.6.1 and schedule 6A.2; and

(ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6A.2.4(c)(4) for that year;

(2) the return on capital is calculated in accordance with clause 6A.6.2;

(3) the depreciation is calculated in accordance with clause 6A.6.3;

(4) the estimated cost of corporate income tax is determined in accordance with clause 6A.6.4;

(5) the revenue increments or decrements are those that arise as a result of the operation of the applicable *efficiency benefit sharing scheme*, as referred to in clause 6A.6.5;

(6) the forecast operating expenditure is accepted or substituted by the *AER* in accordance with clause 6A.6.6(c), clause 6A.6.6(c1) or clause 6A.13.2(b)(3) and (5) (as the case may be); and

(7) the compensation for other risks is such amounts as the *AER* determines are necessary for that year to compensate a *Transmission Network Service Provider* for risks that are not otherwise compensated for in the return on capital, including the risk referred to in clause S6A.2.3(b) of schedule 6A.2.

6A.6 Matters relevant to the making of revenue determinations

6A.6.1 Regulatory asset base

Nature of regulatory asset base

(a) The regulatory asset base for a *transmission system* owned, controlled or operated by a *Transmission Network Service Provider* is the value of those assets that are used by the provider to provide *prescribed transmission services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

(b) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* a model for the roll forward of the regulatory asset base for *transmission systems*, referred to as the *roll forward model*.

(c) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *roll forward model*.

(d) The *AER* must develop and *publish* the first *roll forward model* by 28 September 2007, and there must be such a model available at all times after that date.

Contents of roll forward model

(e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *transmission systems*:

(1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and

(2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the subsequent *regulatory year* of that *regulatory control period*;

under which:

(3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for outturn inflation, consistent with the methodology that was used in the *transmission determination* (if any) for the first mentioned *regulatory control period* for the indexation of the *maximum allowed revenue* during that *regulatory control period*.

Other provisions relating to regulatory asset base

(f) Other provisions relating to regulatory asset bases are set out in schedule 6A.2.

6A.6.2 Return on capital

Calculation of return on capital

(a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Transmission Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6A.6.2) to the value of the regulatory asset base for the relevant *transmission system* as at the beginning of that *regulatory year* (as established in accordance with clause 6A.6.1 and schedule 6A.2).

Weighted average cost of capital

(b) The rate of return for a *Transmission Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *transmission* business of the provider and, subject to any revised values, methodologies and levels arising from a review under paragraphs (f)-(j), must be calculated as a nominal post-tax *weighted average cost of capital* ("*WACC*") in accordance with the following formula:

$$\text{WACC} = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

$\mathbf{k_e}$ is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$$r_f + \beta_e \times \text{MRP}$$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

β_e is the equity beta, which is deemed to be 1.0; and

MRP is the market risk premium, which is deemed to be 6.0%;

$\mathbf{k_d}$ is the return on debt and is calculated as:

$$r_f + \text{DRP}$$

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the market value of equity as a proportion of the market value of equity and debt, which is 1 - D/V; and

D/V is the market value of debt as a proportion of the market value of equity and debt, which is deemed to be 0.6.

Meaning of nominal risk free rate

(c) The nominal risk free rate for a *regulatory control period* is the rate determined for that *regulatory control period* by the *AER* on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:

(1) the indicative mid rates published by the Reserve Bank of Australia; and

(2) a period of time which is either:

(i) a period ('the **agreed period**') proposed by the relevant *Transmission Network Service Provider*, and agreed by the *AER* (such agreement is not to be unreasonably withheld); or

(ii) a period specified by the *AER*, and notified to the provider prior to the commencement of that period, if the period proposed by the provider is not agreed by the *AER* under subparagraph (i),

and, for the purposes of subparagraph (i):

(iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and

(iv) the *AER* must notify the *Transmission Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *Revenue Proposal* under clause 6A.10.1(a).

(d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the *AER* must determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

(e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the *AER* as the margin between the annualised nominal risk free rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a BBB+ credit rating from Standard and Poors and a maturity equal to that used to derive the nominal risk free rate.

Review of rate of return parameters

(f) The *AER* must, in accordance with the *transmission consultation procedures* and paragraphs (g)-(j), carry out reviews of the matters referred to in paragraph (i).

(g) The *AER* must conclude the first review by 1 May 2009 and conclude subsequent reviews at intervals of five years with the first interval starting from 31 March 2009.

(h) The *AER* may, as a consequence of a review, adopt revised values, methodologies or credit rating levels, and, if it does so, it must use those revised values, methodologies and levels, but only for the purposes of a *Revenue Proposal* that is submitted to the *AER* under clause 6A.10.1(a) after the completion of the first review or after completion of the five yearly reviews (as the case may be).

(i) The *AER* may only review:

(1) the values of and methodologies used to calculate:

(i) the nominal risk free rate;

(ii) the equity beta;

(iii) the market risk premium;

(iv) the maturity period and bond rates referred to in paragraph (d); and

(v) the ratio of the market value of debt to the market value of equity and debt,

as set out in this clause 6A.6.2 or as subsequently revised under paragraph (h); and

(2) the credit rating level as referred to in paragraph (e) or as subsequently revised under paragraph (h).

(j) In undertaking a review under this clause 6A.6.2 and under clause 6A.6.4(b), the *AER* must have regard to:

(1) the need for the rate of return calculated for the purposes of paragraph (b) to be a forward looking rate of return that is commensurate with prevailing conditions in the market for funds and the risk involved in providing *prescribed transmission services*;

(2) the need for the return on debt to reflect the current cost of borrowings for comparable debt;

(3) the need for the credit rating levels or the values attributable to, or the methodologies used to calculate, the parameters referred to in paragraphs (i)(1)(ii), (iv), (v) and (i)(2) to be based on a benchmark efficient *Transmission Network Service Provider*; and

(4) where the credit rating levels or the values that are attributable to, or the methodologies used to calculate, the parameters referred to in paragraph (i) cannot be determined with certainty:

(i) the need to achieve an outcome that is consistent with the *national electricity objective*; and

(ii) the need for persuasive evidence before adopting a credit rating level or a value for, or a methodology used to calculate, that parameter that differs from the credit rating level, value or methodology that has previously been adopted for it.

6A.6.3 Depreciation

(a) The depreciation for each *regulatory year*:

(1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *transmission system*; and

(2) must be calculated:

(i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Transmission Network Service Provider*'s *Revenue Proposal*; or

(ii) to the extent the depreciation schedules nominated in the provider's Revenue Proposal do not so conform, using the depreciation schedules determined for that purpose by the *AER* in its final decision on the provider's Revenue Proposal**.**

(b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:

(1) except as provided in paragraph (c), the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;

(2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *transmission system;* and

(3) the economic life of the relevant assets and the depreciation methodologies and rates underpinning the calculation of actual depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the *transmission determination* for that period.

(c) To the extent that:

(1) an asset (or group of assets) the value of which forms part of the regulatory asset base for a *transmission system* is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network User*s; and

(2) the value of the assets (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the commencement of that *regulatory control period*, of $20 million,

that asset (or group of assets) must be depreciated on a straight line basis over the life at which that asset (or group of assets) was first included in the regulatory asset base for that *transmission system*.

6A.6.4 Estimated cost of corporate income tax

(a) The estimated cost of corporate income tax of a *Transmission Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t)(1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of

prescribed transmission services if such an entity, rather than the *Transmission Network Service Provider,* operated the business of the *Transmission Network Service Provider,* such estimate being determined in accordance with the *post-tax revenue model*;

$\mathbf{r_t}$ is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

$\boldsymbol{\gamma}$ is the assumed utilisation of imputation credits, which is deemed to be 0.5.

For these purposes:

(1) the cost of debt must be based on that of a benchmark efficient *Transmission Network Service Provider*; and

(2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Transmission Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *transmission system* for that *regulatory year*.

(b) The *AER* must, in accordance with the *transmission consultation procedures* and clause 6A.6.2(j), carry out reviews of the matters referred to in paragraph (d).

(c) The *AER* must conclude the first review by 1 May 2009 and conclude subsequent reviews at intervals of five years with the first interval starting from 31 March 2009.

(d) The *AER* may only review the value of and methodology used to calculate the assumed utilisation of imputation credits as referred to in paragraph (a) (or as subsequently revised under this clause 6A.6.4).

(e) Where the value of the assumed utilisation of imputation credits referred to in paragraph (d) cannot be determined with certainty, the *AER* must have regard to:

(1) the need to achieve an outcome that is consistent with the *national electricity objective*; and

(2) the need for persuasive evidence before adopting a value that differs from the value that has previously been adopted for it.

(f) If, as a consequence of a review, the *AER* decides to adopt a revised value or methodology, it must use that revised value or methodology, but only for the purposes of a *Revenue Proposal* that is submitted to the *AER* under clause 6A.10.1(a) after the completion of the first review or after completion of the five yearly reviews (as the case may be).

6A.6.5 Efficiency benefit sharing scheme

(a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* a scheme (an *efficiency benefit sharing scheme*) that provides for a fair sharing between *Transmission Network Service Provider*s and *Transmission Network User*s of:

(1) the efficiency gains derived from the operating expenditure of *Transmission Network Service Providers* for a *regulatory control period* being less than; and

(2) the efficiency losses derived from the operating expenditure of *Transmission Network Service Provider*s for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period* in accordance with clause 6A.6.6(c), clause 6A.6.6(c1) or clause 6A.13.2(b)(3) and (5) (as the case may be).

(b) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:

(1) the need to provide *Transmission Network Service Provider*s with a continuous incentive (that is equal in each year of any *regulatory control period*) to reduce operating expenditure;

(2) the desirability of both rewarding *Transmission Network Service Provider*s for efficiency gains and penalising *Transmission Network Service Provider*s for efficiency losses; and

(3) any incentives that *Transmission Network Service Provider*s may have to inappropriately capitalise operating expenditure.

(c) At the same time as it *publishes* an *efficiency benefit sharing scheme* under this clause 6A.6.5, the *AER* must also *publish* parameters ('the *efficiency benefit sharing scheme parameters*') for the scheme. For the avoidance of doubt, unless the *AER* provides otherwise in that scheme, such values may differ as between *Transmission Network Service Provider*s and over time.

(d) The *AER* must set out in each *efficiency benefit sharing scheme* any requirements with which the values attributed to the *efficiency benefit sharing scheme parameters* must comply, but such requirements must not be inconsistent with those factors to which the *AER* must have regard under paragraph (b).

(e) The *AER* must develop and *publish* the first *efficiency benefit sharing scheme* by 28 September 2007, and there must be an *efficiency benefit sharing scheme* in force at all times after that date.

(f) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace an *efficiency benefit sharing scheme*, except that no such amendment or replacement may change the application of the scheme to a *Transmission Network Service Provider* in respect of a *regulatory control period* that has commenced before, or that will commence within 15 months of, the amendment or replacement coming into operation.

(g) Subject to paragraph (h) the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the values to be attributed to the *efficiency benefit sharing scheme parameters*.

(h) An amendment or replacement referred to in paragraph (g) must not change the values to be attributed to the *efficiency benefit sharing scheme parameters* where:

(1) those values must be included in information accompanying a *Revenue Proposal;* and

(2) the *Revenue Proposal* is required to be submitted under clause 6A.10.1(a) at a time that is within 2 months of the *publication* of the amended or replaced *efficiency benefit sharing scheme parameters.*

6A.6.6 Forecast operating expenditure

(a) A *Revenue Proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following ('the *operating expenditure objectives'*):

(1) meet the expected demand for *prescribed transmission services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;

(3) maintain the quality, reliability and security of supply of *prescribed transmission services*; and

(4) maintain the reliability, safety and security of the *transmission system* through the supply of *prescribed transmission services*.

(b) The forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:

(1) comply with the requirements of the *submission guidelines*;

(2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies

set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*; and

(3) include both:

(i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.

(c) The *AER* must accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *operating expenditure objectives*;

(2) the costs that a prudent operator in the circumstances of the relevant *Transmission Network Service Provider* would require to achieve the *operating expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

('the *operating expenditure criteria'*).

(c1) If:

(1) a *Transmission Network Service Provider* made *network support payments* in accordance with a relevant agreement for *network* support services in the previous *regulatory control period;* and

(2) the *Transmission Network Service Provider* must continue to make *network support payments* to fulfil obligations under the relevant agreement for *network* support services in the relevant *regulatory control period*,

the *AER* must accept the forecast of required operating expenditure of the *Transmission Network Service Provider* included in a *Revenue Proposal* in relation to the remainder of costs required to meet obligations under the relevant agreement for *network* support services in the relevant *regulatory control period*.

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal.*

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *operating expenditure factors'*):

(1) the information included in or accompanying the *Revenue Proposal*;

(2) submissions received in the course of consulting on the *Revenue Proposal*;

(3) such analysis as is undertaken by or for the *AER* and is *published* prior to or as part of the draft decision of the *AER* on the *Revenue Proposal* under rule 6A.12 or the final decision of the *AER* on the *Revenue Proposal* under rule 6A.13 (as the case may be);

(4) benchmark operating expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the *regulatory control period*;

(5) the actual and expected operating expenditure of the provider during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent to which the forecast of required operating expenditure of the *Transmission Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) whether the forecast of required operating expenditure includes amounts relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b);

(11) the most recent *NTNDP* and any submissions made by *AEMO*, in accordance with the *Rules*, on the forecast of the *Transmission Network Service Provider's* required operating expenditure;

(12) the extent to which the *Transmission Network Service Provider* has considered and made provision for efficient and prudent non-network alternatives; and

(13) any relevant *project assessment conclusions report* required under clause 5.6.6.

(f) If, in its final decision on the *Revenue Proposal* under rule 6A.13, the *AER* does not accept the total of the forecast required operating expenditure for the *regulatory control period* under paragraph (d), then the *AER* must, in accordance with clause 6A.13.2(b), use a substituted forecast of required operating expenditure.

6A.6.7 Forecast capital expenditure

(a) A *Revenue Proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Transmission Network Service Provider* considers is required in order to achieve each of the following ('the *capital expenditure objectives*'):

(1) meet the expected demand for *prescribed transmission services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;

(3) maintain the quality, reliability and security of supply of *prescribed transmission services*; and

(4) maintain the reliability, safety and security of the *transmission system* through the supply of *prescribed transmission services*.

(b) The forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* must:

(1) comply with the requirements of the *submission guidelines*;

(2) be for expenditure that is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the *Transmission Network Service Provider*;

(3) include both:

(i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and

(4) identify any forecast capital expenditure:

(i) that is for a *reliability augmentation*; or

(ii) that is for an option that has satisfied the *regulatory test* or *regulatory investment test for transmission* (as the case may be).

(c) The *AER* must accept the forecast of required capital expenditure of a *Transmission Network Service Provider* that is included in a *Revenue Proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *capital expenditure objectives*;

(2) the costs that a prudent operator in the circumstances of the relevant *Transmission Network Service Provider* would require to achieve the *capital expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

('the *capital expenditure criteria'*).

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Transmission Network Service Provider.*

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors'*):

(1) the information included in or accompanying the *Revenue Proposal*;

(2) submissions received in the course of consulting on the *Revenue Proposal*;

(3) such analysis as is undertaken by or for the *AER* and is *published* prior to or as part of the draft decision of the *AER* on the *Revenue Proposal* under rule 6A.12 or the final decision of the *AER* on the *Revenue Proposal* under rule 6A.13 (as the case may be);

(4) benchmark capital expenditure that would be incurred by an efficient *Transmission Network Service Provider* over the *regulatory control period*;

(5) the actual and expected capital expenditure of the *Transmission Network Service Provider* during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent to which the forecast of required capital expenditure of the *Transmission Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) whether the forecast of required capital expenditure includes amounts relating to a project that should more appropriately be included as a *contingent project* under clause 6A.8.1(b);

(11) the most recent *NTNDP* and any submissions made by *AEMO*, in accordance with the *Rules,* on the forecast of the *Transmission Network Service Provider*'s required capital expenditure;

(12) the extent to which the *Transmission Network Service Provider* has considered and made provision for efficient and prudent non-network alternatives; and

(13) any relevant *project assessment conclusions report* required under clause 5.6.6.

(f) If, in its final decision on the *Revenue Proposal* made under rule 6A.13, the *AER* does not accept the total of the forecast of required capital expenditure for the *regulatory control period* under paragraph (d), then the *AER* must, in accordance with clause 6A.13.2(b), use a substitute forecast of required capital expenditure.

Forecast capital expenditure and contingent projects

(g) Paragraphs (h) - (k) apply where:

(1) in a *regulatory control period* (the **first *regulatory control period***) the *AER* determines under clause 6A.8.2(e)(1)(iii) that the likely completion date for a *contingent project* is a date which occurs in the immediately following *regulatory control period* (the **second *regulatory control period***); and

(2) there is an unspent amount of capital expenditure for that *contingent project* under paragraph (h).

(h) A *Transmission Network Service Provider*'s *Revenue Proposal* for the second *regulatory control period,* must include in the forecast of required capital expenditure referred to in paragraph (a) an amount of any unspent

capital expenditure for each *contingent project* as described in paragraph (g)(2), that equals the difference (if any) between:

(1) the total capital expenditure for that *contingent project*, as determined by the *AER* in the first *regulatory control period* under clause 6A.8.2(e)(1)(ii); and

(2) the total of the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project*.

(i) The *AER* must include in any forecast capital expenditure for the second *regulatory control period* which is accepted in accordance with paragraph (c), estimated in accordance with clause 6A.14.1(2)(ii) or substituted in accordance with clause 6A.13.2(b)(4) and (5) (as the case may be), the amount of any unspent capital expenditure calculated in accordance with paragraph (h).

(j) Without limiting the requirement in paragraph (i), in deciding whether or not to accept the forecast of required capital expenditure of a *Transmission Network Service Provider* for the second *regulatory control period* in accordance with this clause 6A.6.7, the *AER* must not:

(1) assess the reasonableness of the amount of unspent capital expenditure for a *contingent project* referred to in paragraph (h) or the remaining period to which the *contingent project* applies;

(2) assess the reasonableness of the timing of the unspent capital expenditure within the remaining period for a *contingent project* referred to in paragraph (h) except as part of the assessment of the total forecast capital expenditure under paragraph (c); or

(3) take into account any amount which represents for a *contingent project* referred to in paragraph (h) the difference between:

(i) the amount representing the sum of the forecast capital expenditure for that *contingent project* for each year of the immediately preceding *regulatory control period* referred to in clause 6A.8.2(e)(1)(i); and

(ii) the total capital expenditure actually incurred (or estimated capital expenditure for any part of the preceding *regulatory control period* for which actual capital expenditure is not available) in the immediately preceding *regulatory control period* for that *contingent project*.

(k) A *Revenue Proposal* in respect of the second *regulatory control period* must not include in the forecast of required capital expenditure referred to in paragraph (a) any capital expenditure for a *contingent project* for the first *regulatory control period*:

(1) to the extent that the capital expenditure was included in the amount of capital expenditure for that *contingent project* as determined in the first *regulatory control period* under clause 6A.8.2(e)(1)(i); and

(2) the capital expenditure actually incurred (or estimated capital expenditure for any part of the first *regulatory control period* for which actual capital expenditure is not available) in the first *regulatory control period* for that *contingent project* exceeded the capital expenditure referred to in subparagraph (1).

6A.6.8 The X factor

(a) A *revenue determination* is to include the X factor for each *regulatory year* for a *Transmission Network Service Provider*.

(b) The X factors for each *regulatory year* must be:

(1) providing they comply with the requirements set out in paragraph (c), the X factors for those *regulatory year*s that are nominated in the *Transmission Network Service Provider*'s *Revenue Proposal*; or

(2) to the extent that the X factors nominated in the *Transmission Network Service Provider*'s *Revenue Proposal* do not so comply, the X factors determined for that purpose by the *AER* in its final decision on the *Transmission Network Service Provider*'s *Revenue Proposal*.

(c) The X factor for each *regulatory year* must be such that:

(1) the net present value of the expected *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is equal to the net present value of the *annual building block revenue requirement* for the provider for each *regulatory year* (as calculated in accordance with the *post-tax revenue model*); and

(2) the expected *maximum allowed revenue* for the provider for the last *regulatory year* (as calculated in accordance with the *post-tax revenue model*) is as close as reasonably possible to the *annual building block revenue requirement* for the provider for that *regulatory year* (as calculated in accordance with the *post-tax revenue model*).

(d) For the avoidance of doubt, there may be a different X factor that applies for different *regulatory year*s of the *regulatory control period*.

6A.7 Matters relevant to the adjustment of revenue cap after making of revenue determination

6A.7.1 Reopening of revenue determination for capital expenditure

(a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to revoke and substitute a *revenue determination* that applies to it where:

(1) an event that is beyond the reasonable control of the provider has occurred during that *regulatory control period* and the occurrence of that event during that period (or of an event of a similar kind) could not reasonably have been foreseen by the provider at the time of the making of the *revenue determination* (‘the **event’**);

(2) no forecast capital expenditure was accepted or substituted by the *AER* for that period under clause 6A.6.7(c) or clause 6A.13.2(b)(4) and (5) (as the case may be) in relation to the event that has occurred;

(3) the provider proposes to undertake capital expenditure to rectify the adverse consequences of the event;

(4) the total of the capital expenditure required during the *regulatory control period* to rectify the adverse consequences of the event:

(i) exceeds 5% of the value of the regulatory asset base for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period*;

(ii) is such that, if undertaken, it is reasonably likely (in the absence of any other reduction in capital expenditure) to result in the total actual capital expenditure for that *regulatory control period* exceeding the total of the forecast capital expenditure for that *regulatory control period* as accepted or substituted by the *AER* in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be); and

(5) the provider can demonstrate that it is not able to reduce capital expenditure in other areas to avoid the consequence referred to in clause 6A.7.1(a)(4)(ii) without materially adversely affecting the *reliability* and security of the relevant *transmission system*;

(6) a failure to rectify the adverse consequences of the event would be likely to materially adversely affect the *reliability* and security of the relevant *transmission system*; and

(7) the event is not a *pass through event* or a *contingent project.*

In this paragraph (a), a reference to an event includes a series of events or a state of affairs, which may include a greater than anticipated increase in demand.

(b) An application referred to in paragraph (a) must not be made within 90 *business days* prior to the end of a *regulatory year*.

(c) Following its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must:

(1) consult with the *Transmission Network Service Provider* and such other persons as it considers appropriate in relation to the application; and

(2) make its decision on the application within 60 *business days* of that application being made.

(d) The *AER* must, and must only, revoke a *revenue determination* following an application made in accordance with paragraphs (a) and (b) if the *AER* is satisfied of each of the matters referred to in paragraph (a).

(e) If the *AER* revokes a *revenue determination* under paragraph (d), the *AER* must make a new *revenue determination* in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.

(f) The substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary:

(1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of such additional capital expenditure as the *AER* determines is appropriate (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c)); and

(2) to reflect the effect of any resultant increase in forecast capital expenditure on:

(i) the forecast operating expenditure for the remainder of the *regulatory control period*;

(ii) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and

(iii) the X factor for each of the remaining *regulatory years* of the *regulatory control period*.

(g) If the *AER* revokes and substitutes a *revenue determination* under paragraph (e), that revocation and substitution must take effect from the commencement of the next *regulatory year*.

6A.7.2 Network support pass through

(a) This clause applies where a *network support event* occurs with respect to a *regulatory year* ('the **previous *regulatory year***').

(b) If a *network support event* occurs, a *Transmission Network Service Provider* must seek a determination by the *AER* to pass through to *Transmission Network Users* a *network support pass through amount*.

(c) Where a *Transmission Network Service Provider* seeks a determination as referred to in paragraph (b), the provider must, within 60 *business days* of the end of the previous *regulatory year*, submit to the *AER* a written statement which specifies:

(1) the details of the *network support event* including whether the event was a *negative network support event* or a *positive network support event;*

(2) the amount that the provider proposes should be passed through to *Transmission Network Users* in the *regulatory year* following the previous *regulatory year* as a result of the *network support event*;

(3) evidence:

(i) of the actual increase in the amount of *network support payment*s, including certification by an independent and appropriately qualified expert; and

(ii) that such amounts occur solely as a consequence of the positive *network support event*; and

(4) such other information as may be required pursuant to the *information guidelines* in force under clause 6A.17.2.

(d) If the *AER* determines that a *positive network support event* has occurred in respect of a statement under paragraph (c), the *AER* must determine the *network support pass through amount*, taking into account the matters referred to in paragraph (i).

(e) If the *AER* does not make the determination referred to in paragraph (d) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined

that the amount as proposed in the provider's statement under paragraph (c) is the *network support pass through amount*.

(f) If a *negative network support event* occurs (whether or not the occurrence of that event is notified by the provider to the *AER* under paragraph (c)) and the *AER* determines to impose a requirement on the *Transmission Network Service Provider* in relation to that *negative network support event*, the *AER* must determine the *network support pass through amount* taking into account the matters referred to in paragraph (i).

(g) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (f) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

(h) Before making a determination under paragraph (d) or (f), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *network support event* as the *AER* considers appropriate.

Relevant factors

(i) In making a determination under paragraph (d) or (f), the *AER* must take into account:

(1) the matters and proposals set out in any statement given to the *AER* by the *Transmission Network Service Provider* under paragraph (c);

(2) in the case of a *positive network support event*, the increase in costs in the provision of *prescribed transmission services* that the provider has incurred in the preceding *regulatory year* as a result of the *positive network support event*;

(3) in the case of a *positive network support event*, the efficiency of the provider's decisions and actions in relation to the risk of the event, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *positive network support event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that event;

(4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*;

(5) the need to ensure that the provider only recovers any actual increment in costs under this paragraph (i) to the extent that such increment is solely as a consequence of a *network support event*; and

(6) any other factors the *AER* considers relevant.

6A.7.3 Cost pass through

(a) If a *positive change event* occurs, a *Transmission Network Service Provider* may seek the approval of the *AER* to pass through to *Transmission Network Users* a *positive pass through amount*.

(b) If a *negative change event* occurs, the *AER* may require the *Transmission Network Service Provider* to pass through to *Transmission Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

Positive pass through

(c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Transmission Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:

(1) the details of the *positive change event*;

(2) the date on which the *positive change event* occurred;

(3) the *eligible pass through amount* in respect of that *positive change event*;

(4) the *positive pass through amount* the provider proposes in relation to the *positive change event*;

(5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*;

(6) evidence:

(i) of the actual and likely increase in costs referred to in subparagraph (3); and

(ii) that such costs occur solely as a consequence of the *positive change event*; and

(7) such other information as may be required pursuant to *information guidelines* in force under clause 6A.17.2.

(d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:

(1) the *approved pass through amount*; and

(2) the amount of that *approved pass through amount* that should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*,

taking into account the matters referred to in paragraph (j).

(e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:

(1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and

(2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Transmission Network User*s in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

(f) A *Transmission Network Service Provider* must submit to the *AER*, within 60 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:

(1) the details of the *negative change event* concerned;

(2) the date the *negative change event* occurred;

(3) the costs in the provision of *prescribed transmission services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*;

(4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Transmission Network User*s;

(5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Transmission Network User*s in each *regulatory year* during the *regulatory control period*; and

(6) such other information as may be required pursuant to *information guidelines* in force under clause 6A.17.2.

(g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the

provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:

(1) the *required pass through amount*; and

(2) taking into account the matters referred to in paragraph (j):

(i) how much of that *required pass through amount* should be passed through to *Transmission Network Users* ('the *negative pass through amount'*); and

(ii) the amount of that *negative pass through amount* that should be passed through to *Transmission Network Users* in each *regulatory year* during the *regulatory control period*.

(h) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

(i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* as the *AER* considers appropriate.

Relevant factors

(j) In making a determination under paragraph (d) or (g) in respect of a *Transmission Network Service Provider*, the *AER* must take into account:

(1) the matters and proposals set out in any statement given to the *AER* by the provider under paragraphs (c) or (f) (as the case may be);

(2) in the case of a *positive change event*, the increase in costs in the provision of *prescribed transmission services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*;

(3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*;

(4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*;

(5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*;

(6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER*'s opinion, is complementary to the *tax change event* concerned; and

(7) any other factors the *AER* considers relevant.

6A.7.4 Service target performance incentive scheme

(a) The *AER* must, in accordance with the *transmission consultation procedures*, develop and *publish* an incentive scheme ('a *service target performance incentive scheme'*) that complies with the principles in paragraph (b).

(b) The principles are that the *service target performance incentive scheme* should:

(1) provide incentives for each *Transmission Network Service Provider* to:

(i) provide greater *reliability* of the *transmission system* that is owned, controlled or operated by it at all times when *Transmission Network Users* place greatest value on the *reliability* of the *transmission system*; and

(ii) improve and maintain the *reliability* of those elements of the *transmission system* that are most important to determining *spot prices*;

(2) result in a potential adjustment to the revenue that the *Transmission Network Service Provider* may earn, from the provision of *prescribed transmission services*, in each *regulatory year* in respect of which the *service target performance incentive scheme* applies;

(3) ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the *maximum allowed revenue* for the relevant *regulatory year*;

(4) take into account the *regulatory obligations or requirements* with which *Transmission Network Service Providers* must comply;

(5) take into account any other incentives provided for in the *Rules* that *Transmission Network Service Providers* have to minimise capital or operating expenditure; and

(6) take into account the age and ratings of the assets comprising the relevant *transmission system*.

(c) At the same time as it *publishes* a *service target performance incentive scheme*, the *AER* must also *publish* parameters (the *performance incentive scheme parameters*) for the scheme. For the avoidance of doubt, the parameters may differ as between *Transmission Network Service Providers* and over time.

(d) The *AER* must set out in each *service target performance incentive scheme* any requirements with which the values attributed to the *performance incentive scheme parameters* must comply, and those requirements must be consistent with the principles set out in paragraph (b).

(e) The *AER* must develop and *publish* the first *service target performance incentive scheme* under the *Rules* by 28 September 2007 and there must be a *service target performance incentive scheme* in force at all times after that date.

(f) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace any scheme that is developed and *published* under this clause, except that no such amendment or replacement may change the application of the scheme to a *Transmission Network Service Provider* in respect of a *regulatory control period* that has commenced before, or that will commence within 15 months of, the amendment or replacement coming into operation.

(g) Subject to paragraph (h) the *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the values to be attributed to the *performance incentive scheme parameters*.

(h) An amendment or replacement referred to in paragraph (g) must not change the values to be attributed to the *performance incentive scheme parameters* where:

(1) those values must be included in information accompanying a *Revenue Proposal;* and

(2) the *Revenue Proposal* is required to be submitted under clause 6A.10.1(a) at a time that is within 2 months of the *publication* of the amended or replaced *performance incentive scheme parameters.*

6A.8 Contingent Projects

6A.8.1 Acceptance of a Contingent Project in a revenue determination

(a) A *Revenue Proposal* may include *proposed contingent capital expenditure*, which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking a *proposed contingent project*.

(b) The *AER* must determine that a *proposed contingent project* is a *contingent project* if the *AER* is satisfied that:

(1) the *proposed contingent project* is reasonably required to be undertaken in order to achieve any of the *capital expenditure objectives*;

(2) the *proposed contingent capital expenditure*:

(i) is not otherwise provided for (either in part or in whole) in the total of the forecast capital expenditure for the relevant *regulatory control period* which is accepted in accordance with clause 6A.6.7(c) or substituted in accordance with clauses 6A.13.2(b)(4) and (5) (as the case may be);

(ii) reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of the *proposed contingent project* as described in the *Revenue Proposal*; and

(iii) exceeds either $10 million or 5% of the value of the *maximum allowed revenue* for the relevant *Transmission Network Service Provider* for the first year of the relevant *regulatory control period* whichever is the larger amount;

(3) the *proposed contingent project* and the *proposed contingent capital expenditure*, as described or set out in the *Revenue Proposal*, and the information provided in relation to these matters, complies with the requirements of *submission guidelines* made under clause 6A.10.2; and

(4) the *trigger events* in relation to the *proposed contingent project* which are proposed by the *Transmission Network Service Provider* in its *Revenue Proposal* are appropriate.

(c) In determining whether a *trigger event* in relation to a *proposed contingent project* is appropriate for the purposes of subparagraph (b)(5), the *AER* must have regard to the need for:

(1) a *trigger event* to be reasonably specific and capable of objective verification;

(2) a *trigger event* to be a condition or event, which, if it occurs, makes the undertaking of the *proposed contingent project* reasonably necessary in order to achieve any of the *capital expenditure objectives*;

(3) a *trigger event* to be a condition or event that generates increased costs or categories of costs that relate to a specific location rather than a condition or event that affects the *transmission network* as a whole;

(4) a *trigger event* to be described in such terms that the occurrence of that event or condition is all that is required for the *revenue determination* to be amended under clause 6A.8.2; and

(5) a *trigger event* to be an event or condition, the occurrence of which is probable during the *regulatory control period*, but the inclusion of capital expenditure in relation to it under clause 6A.6.7 is not appropriate because:

(i) it is not sufficiently certain that the event or condition will occur during the *regulatory control period* or if it may occur after that *regulatory control period* or not at all; or

(ii) subject to the requirement to satisfy clause 6A.8.1(b)(2)(iii), the costs associated with the event or condition are not sufficiently certain.

6A.8.2 Amendment of revenue determination for contingent project

(a) Subject to paragraph (b), a *Transmission Network Service Provider* may, during a *regulatory control period*, apply to the *AER* to amend a *revenue determination* that applies to that provider where a *trigger event* for a *contingent project* in relation to that *revenue determination* has occurred.

(b) An application referred to in paragraph (a):

(1) must not be made within 90 *business days* prior to the end of a *regulatory year*;

(2) subject to subparagraph (1), must be made as soon as practicable after the occurrence of the *trigger event*;

(3) must contain the following information:

(i) an explanation that substantiates the occurrence of the *trigger event*;

(ii) a forecast of the total capital expenditure for the *contingent project*;

(iii) a forecast of the capital and incremental operating expenditure, for each remaining *regulatory year* which the *Transmission Network Service Provider* considers is reasonably required for the purpose of undertaking the *contingent project*;

(iv) how the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);

(v) the intended date for commencing the *contingent project* (which must be during the *regulatory control period*);

(vi) the anticipated date for completing the *contingent project* (which may be after the end of the *regulatory control period*); and

(vii) an estimate of the incremental revenue which the *Transmission Network Service Provider* considers is likely to be required to be earned in each remaining *regulatory year* of the *regulatory control period* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(b)(3)(iii); and

(4) the estimate referred to in clause 6A.8.2(b)(3)(vii) must be calculated:

(i) on the basis of the capital expenditure referred to in clause 6A.8.2(b)(3)(iii);

(ii) on the basis of the rate of return for that *Transmission Network Service Provider* for the *regulatory control period* as determined pursuant to clause 6A.6.2;

(iii) consistently with the manner in which depreciation is calculated under clause 6A.6.3;

(iv) to include the incremental operating expenditure referred to in clause 6A.8.2(b)(3)(iii); and

(v) in accordance with the requirements for roll forward in the *roll-forward model* and revenue calculation in the *post-tax revenue model*.

(c) As soon as practicable after its receipt of an application made in accordance with paragraphs (a) and (b), the *AER* must *publish* the application, together with an invitation for written submissions on the application.

(d) The *AER* must consider any written submissions made under paragraph (c) and must make its decision on the application within 30 *business days* of its receipt of that application. In doing so the *AER* may also take into account

such other information as it considers appropriate, including any analysis (such as benchmarking) that is undertaken by it for that purpose.

(e) If the *AER* is satisfied that the *trigger event* has occurred, and that the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii), it must:

(1) determine:

(i) the amount of capital and incremental operating expenditure, for each remaining *regulatory year* which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;

(ii) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the *contingent project*;

(iii) the likely commencement and completion dates for the *contingent project*; and

(iv) the incremental revenue which is likely to be required by the *Transmission Network Service Provider* in each remaining *regulatory year* as a result of the *contingent project* being undertaken as described in clause 6A.8.2(e)(1)(i) and (ii), such estimate being calculated in accordance with subparagraph (2);

(2) calculate the estimate referred to in clause 6A.8.2(e)(1)(iv):

(i) on the basis of the capital expenditure referred to in clause 6A.8.2(e)(1)(i);

(ii) to include the incremental operating expenditure referred to in clause 6A.8.2(e)(1)(i); and

(iii) otherwise in accordance with subparagraph (b)(4); and

(3) amend the *revenue determination* in accordance with paragraph (h).

(f) In making the determinations referred to in subparagraph (e)(1), the *AER* must accept the relevant amounts and dates, contained in the *Transmission Network Service Provider*'s application, as referred to in clauses 6A.8.2(b)(3)(ii) – (vii), if the *AER* is satisfied that:

(1) the forecast of the total capital expenditure for the *contingent project* meets the threshold as referred to in clause 6A.8.1(b)(2)(iii);

(2) the amounts of forecast capital expenditure and incremental operating expenditure reasonably reflect the *capital expenditure criteria* and the

operating expenditure criteria, taking into account the *capital expenditure factors* and the *operating expenditure factors* respectively, in the context of the *contingent project;*

(3) the estimates of incremental revenue are reasonable; and

(4) the dates are reasonable.

(g) In making the determinations referred to in paragraphs (e)(1) and (f), the *AER* must take into account:

(1) the information included in or accompanying the application;

(2) submissions received in the course of consulting on the application;

(3) such analysis as is undertaken by or for the *AER*;

(4) the expenditure that would be incurred in respect of a *contingent project* by an efficient and prudent operator in the circumstances of the *Transmission Network Service Provider;*

(5) the actual and expected capital expenditure of the *Transmission Network Service Provider* for *contingent projects* during any preceding *regulatory control periods*;

(6) the extent to which the forecast capital expenditure for the *contingent project* is referable to arrangements with a person other than the *Transmission Network Service Provider* that, in the opinion of the *AER*, do not reflect arm's length terms;

(7) the relative prices of operating and capital inputs in relation to the *contingent project*;

(8) efficient substitution possibilities between operating and capital expenditure in relation to the *contingent project*; and

(9) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the *service target performance incentive scheme* that is to apply to the provider in respect of the *regulatory control period*.

(h) Amendments to a *revenue determination* referred to in paragraph (e)(3) must only vary the determination to the extent necessary:

(1) to adjust the forecast capital expenditure for that *regulatory control period* to accommodate the amount of capital expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that

adjustment will be taken to be accepted by the *AER* under clause 6A.6.7(c));

(2) to adjust the forecast operating expenditure for that *regulatory control period* to accommodate the amount of incremental operating expenditure determined under clause 6A.8.2(e)(1)(i) (in which case the amount of that adjustment will be taken to be accepted by the *AER* under clause 6A.6.6(c));

(3) to reflect the effect of any resultant increase in forecast capital and operating expenditure on:

(i) the *maximum allowed revenue* for each *regulatory year* in the remainder of the *regulatory control period*; and

(ii) the X factor for each of the remaining *regulatory years* of the *regulatory control period*.

(i) Amendments to a *revenue determination* take effect from the commencement of the next *regulatory year* of the *regulatory control period*.

Part D - Negotiated Transmission Services

6A.9 Negotiated transmission services

6A.9.1 Principles relating to access to negotiated transmission services

The following principles constitute the *Negotiated Transmission Services Principles*:

(1) the price for a *negotiated transmission service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*;

(2) subject to subparagraphs (3) and (4), the price for a *negotiated transmission service* should be at least equal to the avoided cost of providing it but no more than the cost of providing it on a stand alone basis;

(3) if the *negotiated transmission service* is the provision of a *shared transmission service* that:

(i) exceeds the network performance requirements (if any) which that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or

(ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Transmission Network Service Provider's* incremental cost of providing that service;

(4) if the *negotiated transmission service* is the provision of a *shared transmission service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared transmission service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the amount of the *Transmission Network Service Provider's* avoided cost of providing that service;

(5) the price for a *negotiated transmission service* must be the same for all *Transmission Network User*s unless there is a material difference in the costs of providing the *negotiated transmission service* to different *Transmission Network User*s or classes of *Transmission Network User*s;

(6) the price for a *negotiated transmission service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in which case such adjustment should reflect the extent to which the costs of that asset is being recovered through charges to that other person;

(7) the price for a *negotiated transmission service* should be such as to enable the *Transmission Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated transmission service*;

(8) any *access charges* should be based on the costs reasonably incurred by the *Transmission Network Service Provider* in providing *transmission network user access* and (in the case of compensation referred to in rules 5.4A(h) - (j)) on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in rule 5.4A(h)-(j) where an event referred to in those paragraphs occurs;

(9) the *terms and conditions of access* for a *negotiated transmission service* should be fair and reasonable and consistent with the safe and

reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated transmission service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause 6A.9.1);

(10) the *terms and conditions of access* for a *negotiated transmission service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Transmission Network Service Provider* and the other party, the price for the *negotiated transmission service* and the costs to the *Transmission Network Service Provider* of providing the *negotiated transmission service*; and

(11) the *terms and conditions of access* for a *negotiated transmission service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and *reliable* operation of the *power system* in accordance with the *Rules*.

6A.9.2 Determination of terms and conditions of access for negotiated transmission services

(a) A *Transmission Network Service Provider* must comply with:

(1) the provider's *negotiating framework*; and

(2) the provider's *Negotiated Transmission Service Criteria*,

when the provider is negotiating the *terms and conditions of access* for *negotiated transmission services* to be provided to a person.

(b) The *Transmission Network Service Provider* must also comply with Chapters 4, 5, and this Chapter 6A of the *Rules*, including the requirements of:

(1) rules 5.3 and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service* charges; and

(2) rule 5.4A when negotiating the *use of system services charges* and *access charge*s to be paid to or by a *Transmission Network User*.

6A.9.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a *transmission determination* for a *Transmission Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of the provider's *negotiating framework*.

6A.9.4 Negotiated transmission criteria determination

(a) The determination by the *AER* specifying the *Negotiated Transmission Service Criteria* forming part of a *transmission determination* for a *Transmission Network Service Provider* is to set out the criteria that are to be applied:

(1) by the provider in negotiating:

(i) the *terms and conditions of access* for *negotiated transmission services,* including the prices that are to be charged for the provision of those services by the provider for the relevant *regulatory control period*;

(ii) any *access charge*s which are negotiated by the provider during that *regulatory control period*; and

(2) by a *commercial arbitrator* in resolving any dispute, between the *Transmission Network Service Provider* and a person who wishes to receive a *negotiated transmission service*, in relation to:

(i) the *terms and conditions of access* for the *negotiated transmission service,* including the price that is to be charged for the provision of that service by the provider;

(ii) any *access charge*s that are to be paid to or by the provider.

(b) The *Negotiated Transmission Service Criteria* must give effect to and be consistent with the *Negotiated Transmission Service Principles* set out in clause 6A.9.1.

6A.9.5 Preparation of and requirements for negotiating framework

(a) A *Transmission Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated transmission service* from the provider, as to the *terms and conditions of access* for provision of the service.

(b) The *negotiating framework* for a *Transmission Network Service Provider* must comply with and be consistent with:

(1) the applicable requirements of a *transmission determination* applying to the provider; and

(2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

(c) The *negotiating framework* for a *Transmission Network Service Provider* must specify:

(1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* for provision of the *negotiated transmission service*;

(2) a requirement for the provider to provide all such commercial information as a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated transmission service*, including the cost information described in subparagraph (3);

(3) a requirement for the provider:

(i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated transmission service*; and

(ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated transmission service* reflect those costs and/or the cost increment or decrement (as appropriate);

(4) a requirement for a *Service Applicant* to provide all such commercial information as the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated transmission service*;

(5) a reasonable period of time for commencing, progressing and finalising negotiations with a *Service Applicant* for the provision of the *negotiated transmission service*, and a requirement that each party to the negotiation must use its reasonable endeavours to adhere to those time periods during the negotiation;

(6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of acces*s for provision of *negotiated transmission services* are to be dealt with in accordance with Part K of this Chapter 6A;

(7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated transmission service*;

(8) a requirement that the *Transmission Network Service Provider* determine the potential impact on other *Transmission Network Users* of the provision of the *negotiated transmission service*; and

(9) a requirement that the *Transmission Network Service Provider* must notify and consult with any affected *Transmission Network Users* and

ensure that the provision of the *negotiated transmission services* does not result in non-compliance with obligations in relation to other *Transmission Network Users* under the *Rules.*

(d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the other requirements of Chapters 4, 5 and this Chapter 6A of the *Rules* and, in the event of any inconsistency, the other requirements in the *Rules* prevail.

(e) Each *Transmission Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated transmission service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6A.9.6 Confidential information

(a) Commercial information which is required to be provided to a *Service Applicant* in accordance with clause 6A.9.5(c)(2):

(1) does not include confidential information provided to the *Transmission Network Service Provider* by another person; and

(2) may be provided subject to a condition that a *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Transmission Network Service Provider* which provided the information to that applicant.

(b) Commercial information which is required to be provided to a *Transmission Network Service Provider* in accordance with clause 6A.9.5(c)(4):

(1) does not include confidential information provided to a *Service Applicant* by another person; and

(2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant* which provided the information to the provider.

6A.9.7 Commercial arbitration for negotiated transmission services

Part K of this Chapter 6A applies to any dispute which may arise between a *Transmission Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* which the provider proposes to apply to the *Service Applicant* for the provision of a *negotiated transmission service*.

Part E - Procedure – Revenue determinations, negotiating frameworks and pricing methodologies

6A.10 Revenue Proposal, proposed negotiating framework and proposed pricing methodology

6A.10.1 Submission of proposal, framework, pricing methodology and information

(a) A *Transmission Network Service Provider* must submit to the *AER* a *Revenue Proposal* and a proposed *pricing methodology* relating to the *prescribed transmission services* that are provided by means of, or in connection with, a *transmission system* that is owned, controlled or operated by that provider:

(1) if any of those *prescribed transmission services* are subject to a *transmission determination*, 13 months before the expiry of the period in respect of which that *transmission determination* applies; or

(2) if any of those *prescribed transmission services* are not subject to a *transmission determination*, 3 months after being required to do so by the *AER*.

(b) At the same time as it submits a *Revenue Proposal* under paragraph (a), the provider must also submit to the *AER* a proposed *negotiating framework*.

(c) The *Revenue Proposal* and the proposed *negotiating framework* must comply with the requirements of, and must contain or be accompanied by such information as is required by, the *submission guidelines* made for that purpose under this rule 6A.10.

(d) The proposed *negotiating framework* must also comply with the requirements of clause 6A.9.5.

(e) A proposed *pricing methodology* must:

(1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and

(2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.

(f) The *Revenue Proposal* must also include a statement of whether it is consistent with the most recent *NTNDP* and, if it is inconsistent, identify and give reasons for the inconsistency.

6A.10.2 Submission guidelines

(a) The *AER* must make guidelines, referred to as '*submission guidelines*', for the purposes of this Part E.

(b) The *submission guidelines* must specify:

(1) the form of a *Revenue Proposal* and *negotiating framework*;

(2) the requirements for any information contained in or accompanying the *Revenue Proposal* to be audited or otherwise verified;

(3) what parts (if any) of the *Revenue Proposal* or the information accompanying it will not be publicly disclosed without the consent of the *Transmission Network Service Provider*, with the presumption being that at least the matters or information referred to in the following clauses will be publicly disclosed:

(i) clause S6A.1.1;

(ii) clause S6A.1.2;

(iii) clauses S6A.1.3(1)-(3), (4)(i) and (ii), (6), (8) and (9); and

(iv) clauses 6A.10.2(b)(7) and (8);

(4) that the *Revenue Proposal* must contain at least the information and matters relating to capital expenditure set out in clause S6A.1.1;

(5) that the *Revenue Proposal* must contain at least the information and matters relating to operating expenditure set out in clause S6A.1.2;

(6) that the *Revenue Proposal* must contain at least the additional information and matters set out in clause S6A.1.3;

(7) that the *Revenue Proposal* must be accompanied by such information as is necessary to enable the *AER* and other interested parties to understand the manner in which the *Transmission Network Service Provider* proposes that negotiations as to the price of *negotiated transmission services* or the amount of *access charge*s will be conducted in accordance with the provider's proposed *negotiating framework*;

(8) such other information as the *AER* considers should be contained in, or should accompany, a *Revenue Proposal* on the basis that such information is necessary to enable the *AER* and other interested parties to:

(i) understand how the *Transmission Network Service Provider* derived the elements of its *Revenue Proposal*; and

(ii) form an opinion as to whether the *Revenue Proposal* complies with the requirements of Parts B and E of this Chapter 6A; and

(9) in the case of amounts, values or inputs that:

(i) cannot be determined before the submission of the *Revenue Proposal*; or

(ii) are required to be estimated, approved or otherwise determined by the *AER* but are not so estimated, approved or otherwise determined before the submission of the *Revenue Proposal*,

what amounts, values or inputs are to be used in their place for the purposes of the *Revenue Proposal* or revised *Revenue Proposal* (as the case may be).

(c) Without limiting any other provision of this rule 6A.10, the *submission guidelines* must provide that:

(1) the information accompanying the *Revenue Proposal* must include:

(i) the *post-tax revenue model*, completed in such a way as to show its application to the *Transmission Network Service Provider*; and

(ii) the completed *roll forward model*; and

(2) the completed *post-tax revenue model* and proposed *roll forward model*, and the information in those models, will not be publicly disclosed without the consent of the provider, except to the extent that the information is aggregated or otherwise available apart from it being contained in those models.

(d) The *AER* must, in accordance with the *transmission consultation procedures,* develop and make the *submission guidelines* by 28 September 2007, and there must be *submission guidelines* available at all times after that date.

(e) The *submission guidelines* may be amended or replaced by the *AER* from time to time, in accordance with the *transmission consultation procedures*.

6A.11 Preliminary examination and consultation

6A.11.1 Preliminary examination and determination of non-compliance with relevant requirements

(a) If the *AER* determines that:

(1) a *Revenue Proposal* submitted by a *Transmission Network Service Provider*;

(2) a proposed *negotiating framework* submitted by the provider;

(3) a proposed *pricing methodology* submitted by the provider; or

(4) information contained in or accompanying such a *Revenue Proposal*, proposed *negotiating framework*, or proposed *pricing methodology,*

under clause 6A.10.1 does not comply with the requirements of:

(5) the *submission guidelines* (in respect of a *Revenue Proposal*);

(6) clause 6A.9.5 (in respect of a proposed *negotiating framework*); or

(7) clause 6A.10.1(e) (in respect of a proposed *pricing methodology*),

the *AER* must notify the provider of that determination as soon as practicable after receiving that *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or information (as the case may be).

(b) A determination referred to in paragraph (a) must be accompanied by written reasons that set out:

(1) the respects in which the *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or information does not comply with the relevant requirements of the *submission guidelines* clause 6A.9.5, or clause 6A.10.1(e) (as the case may be) and the requirements that have not been complied with; and

(2) in the case of information which does not comply with those requirements, the reason that the submission of information in accordance with those requirements would assist the *AER* in assessing the *Revenue Proposal*, proposed *negotiating framework* or proposed *pricing methodology.*

6A.11.2 Resubmission of proposal, framework, pricing methodology or information

(a) If the *AER* notifies a *Transmission Network Service Provider* of a determination under clause 6A.11.1, the provider must, within 1 month of that notice, resubmit its *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* or the required information (as the case may be) in a form that complies with the relevant requirements set out in that determination.

(b) A *Transmission Network Service Provider* may only make changes to its *Revenue Proposal*, proposed *negotiating framework*, or proposed *pricing methodology* for the purposes of paragraph (a) to address the matters raised in the determination under clause 6A.11.1.

6A.11.3 Resubmission of proposal, framework, pricing methodology or information

(a) Except to the extent that the *submission guidelines* or the *pricing methodology guidelines* provide that it will not be publicly disclosed (and, in that case, the relevant *Transmission Network Service Provider* has not otherwise consented), the *AER* must *publish*:

(1) the *Revenue Proposal*;

(2) the proposed *negotiating framework;*

(3) the proposed *pricing methodology*; and

(4) the information,

submitted or resubmitted to it by the provider under rule 6A.9, 6A.10 or this rule 6A.11, together with:

(5) the *AER's* proposed *Negotiated Transmission Service Criteria* for the provider; and

(6) an invitation for written submissions on the documents and information referred to in subparagraphs (1)-(4),

as soon as practicable after the *AER* determines that the *Revenue Proposal*, proposed *negotiating framework*, proposed *pricing methodology* and information comply with the requirements of the *submission guidelines*, clause 6A.9.5 or clause 6A.10.1(e) (as applicable).

(b) The *AER* may *publish* an issues paper examining the issues raised in connection with the *Revenue Proposal*, the proposed *negotiating framework,* the proposed *pricing methodology* and the proposed *Negotiated Transmission Service Criteria,* at the same time as, or subsequent to,

publication of the invitation to make submissions referred to in paragraph (a)(6).

(c) Any person may make a written submission to the *AER* on the *Revenue Proposal*, the proposed *negotiating framework*, the proposed *pricing methodology* or the proposed *Negotiated Transmission Service Criteria* for the provider within the time specified in the invitation referred to in paragraph (a)(6), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6A.12 Draft decision and further consultation

6A.12.1 Making of draft decision

(a) Subject to rule 6A.16(a), the *AER* must consider any written submissions made under rule 6A.11 and must make a draft decision in relation to the *Transmission Network Service Provider*.

(b) The *AER*'s draft decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.

(c) If the *AER* refuses to approve any of the amounts or values referred to in clause 6A.14.1(1), the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve those amounts or values.

(d) If the *AER* refuses to approve the proposed *negotiating framework*, the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve the framework.

(e) If the *AER* refuses to approve any aspect of a proposed *pricing methodology*, the *AER*'s draft decision must include details of the changes required or matters to be addressed before the *AER* will approve the proposed methodology.

6A.12.2 Publication of draft decision and consultation

(a) The *AER* must, as soon as practicable but not later than 6 months after the relevant date referred to in clause 6A.10.1(a), *publish*:

(1) its draft decision and reasons under clause 6A.12.1 and rule 6A.14;

(2) notice of the making of the draft decision;

(3) notice of a predetermination conference; and

(4) an invitation for written submissions on its draft decision.

(b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(3) for the purpose of explaining its draft decision and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.

(c) Any person may make a written submission to the *AER* on the draft decision within the time specified in the invitation referred to in paragraph (a)(4), which must be not earlier than 45 *business days* after the holding of a predetermination conference.

6A.12.3 Submission of revised proposal, framework or pricing methodology

(a) In addition to making such other written submissions as it considers appropriate, the *Transmission Network Service Provider* may, not more than 30 *business days* after the publication of the draft decision, submit to the *AER*:

(1) a revised *Revenue Proposal*;

(2) a revised proposed *negotiating framework*; or

(3) a revised proposed *pricing methodology*.

(b) A *Transmission Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required by, or to address matters raised in, the draft decision.

(c) A revised *Revenue Proposal* or revised proposed *negotiating framework* must comply with the requirements of, and must contain or be accompanied by such information as is required by, the *submission guidelines*.

(d) The revised proposed *negotiating framework* must also comply with the requirements of clause 6A.9.5.

(e) A revised proposed *pricing methodology* must:

(1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and

(2) comply with the requirements of, and must contain or be accompanied by such information as is required by, the *pricing methodology guidelines*.

(f) Except to the extent that the *submission guidelines* or the *pricing methodology guidelines* (as the case may be) provide that it will not be publicly disclosed (and, in that case, the *Transmission Network Service Provider* has not otherwise consented), the *AER* must *publish*:

(1) any revised *Revenue Proposal*;

(2) any revised proposed *negotiating framework*; or

(3) any revised proposed *pricing methodology*,

(as the case may be), that is submitted by the *Transmission Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.

6A.13 Final decision

6A.13.1 Making of final decision

(a) Subject to rule 6A.16(a), the *AER* must consider any submissions made on the draft decision, or on any revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* submitted to it under clause 6A.12.3, and must make a final decision in relation to the *Transmission Network Service Provider*.

(b) The *AER*'s final decision must be made in accordance with, and must comply with, the relevant requirements of rule 6A.14.

6A.13.2 Refusal to approve amounts, values, framework or pricing methodology

(a) If the *AER's* final decision is to refuse to approve an amount or value referred to in clause 6A.14.1(1), the *AER* must include in its final decision a substitute amount or value which, except as provided in paragraph (b), is:

(1) determined on the basis of the current *Revenue Proposal*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

(b) If the *AER*'s final decision is to refuse to approve an amount or value referred to in clause 6A.14.1(1) for the reason that, or a reason which includes the reason that, the *AER* is not satisfied that:

(1) the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*; or

(2) the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*,

the *AER* must:

(3) where subparagraph (1) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(3)(ii)) the forecast operating expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(3)(ii);

(4) where subparagraph (2) applies, include in its final decision (in addition to the estimate referred to in clause 6A.14.1(2)(ii)) the forecast capital expenditure for each *regulatory year* which the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, subject only to the requirement that the total of such forecasts must equate to the estimate referred to in clause 6A.14.1(2)(ii); and

(5) use each such amount (and its components) in place of the forecast of required operating or capital expenditure that is included in the current *Revenue Proposal* for the purposes of calculating the amount or value that it has refused to approve in its final decision.

(c) If the *AER*'s final decision is to refuse to approve the proposed *negotiating framework* referred to in clause 6A.14.1(6), the *AER* must include in its final decision an amended *negotiating framework* which is:

(1) determined on the basis of the current proposed *negotiating framework*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

(d) If the *AER's* final decision is to refuse to approve the proposed *pricing methodology*, the *AER* must include in its final decision an amended *pricing methodology* which is:

(1) determined on the basis of the current proposed *pricing methodology*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

6A.13.3 Notice of final decision

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

(1) notice of the making of the final decision; and

(2) the final decision, including the reasons required to be included in it.

6A.13.4 Making of transmission determination

The *AER* must, as soon as practicable after making its final decision, make the *transmission determination* to which the final decision relates.

6A.14 Requirements relating to draft and final decisions

6A.14.1 Contents of decisions

A draft decision under rule 6A.12 or a final decision under rule 6A.13 is a decision by the *AER*:

(1) on the *Transmission Network Service Provider's* current *Revenue Proposal* in which the *AER* either approves or refuses to approve:

(i) the *total revenue cap* for the provider for the *regulatory control period*;

(ii) the *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period*;

(iii) the values that are to be attributed to the *performance incentive scheme parameters* for the *service target performance incentive scheme* that is to apply to the provider in respect of the *regulatory control period*;

(iv) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the *efficiency benefit sharing scheme* that is to apply to the provider in respect of the *regulatory control period*; and

(v) the commencement and length of the *regulatory control period* that has been proposed by the provider,

as set out in the *Revenue Proposal*, setting out the reasons for the decision;

(2) in which the *AER* either:

(i) acting in accordance with clause 6A.6.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or

(ii) acting in accordance with clause 6A.6.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *Revenue Proposal,* in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the

capital expenditure criteria, taking into account the *capital expenditure factors*;

(3) in which the *AER* either:

(i) acting in accordance with clause 6A.6.6(c) or clause 6A.6.6(c1), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*; or

(ii) acting in accordance with clause 6A.6.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *Revenue Proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Transmission Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

(4) in which the *AER* determines:

(i) whether each of the *proposed contingent projects* (if any) described in the current *Revenue Proposal* are *contingent projects* for the purposes of the *revenue determination* in which case the decision must clearly identify each of those *contingent projects;*

(ii) the capital expenditure that it is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*, in the context of each *contingent project* as described in the current *Revenue Proposal*;

(iii) the *trigger events* in relation to each *contingent project* (in which case the decision must clearly specify those *trigger events*); and

(iv) if the *AER* determines that such a *proposed contingent project* is not a *contingent project* for the purposes of the *revenue determination*, its reasons for that conclusion, having regard to the requirements of clause 6A.8.1(b);

(5) in which the *AER* sets out the amounts, values or inputs that it has used in place of those referred to in clause 6A.10.2(b)(9);

(6) on the provider's current proposed *negotiating framework*, in which the *AER* either approves or refuses to approve the proposed *negotiating framework*, setting out reasons for its decision;

(7) in which the *AER* specifies the *Negotiated Transmission Service Pricing Criteria* for the *Transmission Network Service Provider*, setting out the reasons for the decision; and

(8) on the *Transmission Network Service Provider's* current proposed *pricing methodology*, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision.

6A.14.2 Reasons for decisions

The reasons given by the *AER* for a draft decision under rule 6A.12 or a final decision under rule 6A.13 must set out the basis and rationale of the decision, including:

(1) details of the qualitative and quantitative methodologies applied in any calculations and formulae made or used by the *AER* for the purposes of its decision;

(2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:

(i) whether those values have been taken or derived from the provider's current *Revenue Proposal*; and

(ii) if not, the rationale for the adoption of those values;

(3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses for the purposes of the decision; and

(4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in Part C of this Chapter 6A, for the purposes of the decision.

6A.14.3 Circumstances in which matters must be approved or accepted

(a) This clause set out the circumstances in which the *AER* must approve or accept certain matters for the purposes of a draft decision under rule 6A.12 or a final decision under rule 6A.13. Subject to any provision of this Chapter 6A, if the *AER* is not required to approve or accept such a matter in accordance with this clause, it may, but is not required to, refuse to approve or accept that matter.

(b) The *AER* must approve:

(1) the *total revenue cap* for a *Transmission Network Service Provider* for a *regulatory control period*; and

(2) the *maximum allowed revenue* for the provider for each *regulatory year* of the *regulatory control period*,

as set out in the current *Revenue Proposal*, if the *AER* is satisfied that:

(3) those amounts have been properly calculated using the *post-tax revenue model*; and

(4) those amounts, and any amount required to be calculated, determined or forecast for the purposes of calculating those amounts, have otherwise been calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6A, (for these purposes, the *AER* is taken to be so satisfied in respect of a particular amount if another provision of this Chapter 6A requires the *AER* to approve or accept that amount).

(c) If a *Transmission Network Service Provider*'s revised *Revenue Proposal* submitted under clause 6A.12.3(a) includes:

(1) an amount of total forecast capital expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12; or

(2) an amount of total forecast operating expenditure for the *regulatory control period* that is the same as that accepted or estimated (as the case may be) by the *AER* in a draft decision under rule 6A.12,

then, except to the extent that:

(3) either or both of the following apply:

(i) other changes have been made in the revised *Revenue Proposal*; or

(ii) the information contained in or accompanying the revised *Revenue Proposal* differs from that contained in or accompanying the previous *Revenue Proposal*; and

(4) the changes are such that the *AER* is not satisfied as referred to in clauses 6A.6.6(c) or 6A.6.7(c) (as the case may be),

the *AER*, in its final decision, must accept the forecast of required operating expenditure or of required capital expenditure (as the case may be) that is included in the revised *Revenue Proposal*.

(d) The *AER* must approve:

(1) the values that are to be attributed to the *performance incentive scheme parameters* for the *service target performance incentive*

scheme that is to apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*; and

(2) the values that are to be attributed to the *efficiency benefit sharing scheme parameters* for the *efficiency benefit sharing scheme* that is to apply to a *Transmission Network Service Provider* in respect of a *regulatory control period*,

as set out in the current *Revenue Proposal*, if the *AER* is satisfied that those values comply with the requirements relating to them set out in the *service target performance incentive scheme* or the *efficiency benefit sharing scheme* (as the case may be).

(e) The *AER* must approve the commencement and length of the *regulatory control period* as proposed by a *Transmission Network Service Provider* in the provider's current *Revenue Proposal* if the length of the *regulatory control period* as so proposed is 5 *regulatory year*s.

(f) The *AER* must approve a *Transmission Network Service Provider*'s current proposed *negotiating framework* if the *AER* is satisfied that the relevant proposed *negotiating framework* meets the requirements set out in clause 6A.9.5(c).

(g) The *AER* must approve a *Transmission Network Service Provider*'s current proposed *pricing methodology* if the *AER* is satisfied that the methodology:

(1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services;* and

(2)complies with the requirements of the *pricing methodology guidelines*.

(h) If a *Transmission Network Service Provider's* revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* (as the case may be) submitted under clause 6A.12.3(a):

(1) contains the changes required under clause 6A.12.1; or

(2) does not contain those changes but otherwise (in the *AER's* view), adequately addresses the matters which prompted the *AER* to require those changes,

then, except to the extent that:

(3) either or both of the following apply:

(i) other changes have been made in the revised *Revenue Proposal*, the revised proposed *negotiating framework* or the revised proposed *pricing methodology*, by the provider; or

(ii) the information contained in or accompanying the revised *Revenue Proposal*, revised proposed *negotiating framework* or revised proposed *pricing methodology* differs from that contained in or accompanying the previous *Revenue Proposal*, proposed *negotiating framework* or proposed *pricing methodology* submitted or resubmitted; and

(4) the changes would justify the *AER*, in its final decision, in refusing to approve the amounts or values referred to in clause 6A.14.1(5), the proposed *negotiating framework* referred to in clause 6A.13.2(c) or the proposed *pricing methodology* referred to in clause 6A.13.2(d),

the *AER*'s final decision must be to approve those amounts or values, that proposed *negotiating framework* or that proposed *pricing methodology*.

(i) The *AER* must only specify criteria as *Negotiated Transmission Service Criteria* for a *Transmission Network Service Provider* in a draft or final decision under rule 6A.12 or 6A.13 if those criteria give effect to and are consistent with the *Negotiated Transmission Services Principles*.

6A.15 Revocation of revenue determination or amendment of pricing methodology for wrong information or error

(a) Except as provided in clause 6A.7.1(d), the *AER* may only revoke a *revenue determination* or amend an existing *pricing methodology* during a *regulatory control period* where it appears to the *AER* that:

(1) the *total revenue cap* was set or the *pricing methodology* was approved on the basis of information provided by or on behalf of the relevant *Transmission Network Service Provider* to the *AER* that was false or misleading in a material particular; or

(2) there was a material error in the *total revenue cap* or in the *pricing methodology*.

(b) If the *AER* revokes a *revenue determination* under paragraph (a)(1), the *AER* must make a new *revenue determination* in substitution for the revoked *revenue determination* to apply for the remainder of the *regulatory control period* for which the revoked *revenue determination* was to apply.

(c) If the *AER* revokes a *revenue determination* under paragraph (a)(2), the substituted *revenue determination* must only vary from the revoked *revenue determination* to the extent necessary to correct the relevant error.

(d) If the *AER* amends a *pricing methodology* under paragraph (a)(1), the amended methodology applies to the setting of prices for the next *financial year* and for the remainder of the relevant *regulatory control period*.

(e) If the *AER* amends a *pricing methodology* under paragraph (a)(2), the amended methodology must only vary from the existing *pricing methodology* to the extent necessary to correct the relevant error.

(f) The *AER* may only revoke and substitute a *revenue determination* or amend a *pricing methodology* under this rule 6A.15, if it has first consulted with the relevant *Transmission Network Service Provider* and such other persons as it considers appropriate.

6A.16 Miscellaneous

(a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.

(b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.

(c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6A.11.3(a)(6) or 6A.12.2(a)(4) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.

(d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.

(e) The *AER* may give such weight to confidential information identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.

(f) Paragraph (d) does not apply to the extent that any other provision of the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F - Information Disclosure

6A.17 Information disclosure by Transmission Network Service Providers

6A.17.1 Information to be provided to AER

(a) In this rule 6A.17, '**certified annual statement**' means an annual statement provided by a *Transmission Network Service Provider* under this rule 6A.17 and certified in accordance with the *information guidelines*.

(b) A *Transmission Network Service Provider* must submit to the *AER*, in the manner and form set out in the *information guidelines*, annual statements that:

(1) provide a true and fair statement of the financial and operating performance of the provider;

(2) are certified in accordance with the *information guidelines*; and

(3) otherwise comply with the requirements of this clause and the *information guidelines*.

(c) In addition to the certified annual statements, the *AER* may require a *Transmission Network Service Provider* to provide, by a date and in the form and manner specified by the *AER*, any additional information the *AER* reasonably requires for a purpose set out in paragraph (d).

(d) The certified annual statements and additional information provided by a *Transmission Network Service Provider* to the *AER* under this rule 6A.17 may be used by the *AER* only for the following purposes:

(1) to monitor, report on and enforce the compliance of the provider with the *total revenue cap* for the provider for a *regulatory control period*, the *maximum allowed revenue* for the provider for each *regulatory year*, and any requirements that are imposed on the provider under a *transmission determination*;

(2) to monitor, report on and enforce compliance with the provider's *Cost Allocation Methodology*;

(3) as an input regarding the financial, economic and operational performance of the provider, to inform the *AER's* decision-making for the making of *revenue determinations* or other regulatory controls to apply in future *regulatory control periods*; and

(4) to monitor and report on the performance of the provider under any *service target performance incentive scheme* that applies to it;

(5) for the preparation of a *network service provider performance report*.

(e) The *AER* may request or undertake verification or independent audit of any information sought by it, or provided to it, under this rule 6A.17.

6A.17.2 Information Guidelines

Preparation, publication and amendment of Information Guidelines

(a) The *AER* must, in accordance with the *transmission consultation procedures*, prepare and *publish information guidelines.*

(b) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *information guidelines*.

(c) The *AER* must develop and publish the first *information guidelines* by 28 September 2007 and there must be *information guidelines* available at all times after that date.

Contents of information guidelines

(d) The *information guidelines* must provide for the manner and form in which *Transmission Network Service Provider*s must submit certified annual statements to the *AER*, including the date each year by which those statements must be submitted to the *AER*.

(e) The *information guidelines* may only require the inclusion in the certified annual statements of:

(1) such information as the *AER* reasonably requires for a purpose set out in clause 6A.17.1(d);

(2) information on the amount of each instance, during the relevant reporting period, of a reduction under clause 6A.26.1(c) in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission services* provided by the *Transmission Network Service Provider*;

(3) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for *prescribed TUOS services* or *prescribed common transmission services* (or both) that were recovered under rule 6A.26 from other *Transmission Customers* for *prescribed TUOS services* or *prescribed common transmission services*; and

(4) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the *AER* with respect to reductions in the prices payable by a *Transmission*

Customer for the relevant *prescribed transmission services* under subparagraph (2) or (3) is confidential information.

(f) The *information guidelines* may provide for the information that must accompany a written statement seeking approval of the *AER* to pass through a *positive pass through amount* or a *negative pass through amount* under clause 6A.7.3.

(g) The *information guidelines* may specify the information that must be submitted with any application made under clause 6A.26.2(b), including:

(1) details of the circumstances in which a discount amount has arisen and of the calculation of the proposed recovery amount; and

(2) the information necessary to substantiate how the requirements of clause 6A.26.1(f) are satisfied.

(h) The *information guidelines* may provide, for the purposes of rule 6A.27, rule 6A.28 and rule 6A.29, for:

(1) the information that each *Transmission Network Service Provider* must supply to a *Co-ordinating Network Service Provider* and other *Transmission Network Service Providers* for the purposes of cost allocation under the provider's *pricing methodology*, including:

(i) electrical parameters for each optimised element of the *network* and the *network* configuration;

(ii) hourly *load* data for each exit point for the *survey period*;

(iii) hourly *generation* data for each entry point for the *survey period*;

(iv) *voltage* control arrangements and *voltage* profile; and

(v) the *ASRR* for the categories of *prescribed TUOS services* and *prescribed common transmission services.*

(2) the derivation of hourly *load* data from *metering data* by the aggregation of the *energy meter* reading figures in respect of each hour.

6A.18 [Deleted]

Part G - Cost Allocation

6A.19 Cost allocation

6A.19.1 Duty to comply with Cost Allocation Methodology

A *Transmission Network Service Provider* must comply with the *Cost Allocation Methodology* that has been approved in respect of that provider from time to time by the *AER* under this rule 6A.19.

6A.19.2 Cost Allocation Principles

The following principles constitute the *Cost Allocation Principles*:

(1) the detailed principles and policies used by a *Transmission Network Service Provider* to allocate costs between different categories of *transmission services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;

(2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;

(3) only the following costs may be allocated to a particular category of *transmission services*:

(i) costs which are directly attributable to the provision of those services; and

(ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:

(A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and

(B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted *Cost Allocation Methodology*;

(4) any *Cost Allocation Methodology* which is used, the reasons for using that methodology and the numeric quantity (if any) of the chosen allocator must be clearly described;

(5) the same cost must not be allocated more than once;

(6) the principles, policies and approach used to allocate costs must be consistent with the *Transmission Ring-Fencing Guidelines*;

(7) costs which have been allocated to *prescribed transmission services* must not be reallocated to *negotiated transmission services*; and

(8) costs which have been allocated to *negotiated transmission services* may be reallocated to *prescribed transmission services* to the extent they satisfy the principle referred to in subparagraph (3).

Note. The Cost Allocation Guidelines are required by clause 6A.19.3 to give effect to and be consistent with, the Cost Allocation Principles.

6A.19.3 Cost Allocation Guidelines

(a) The *AER* must, in accordance with the *transmission consultation procedures*, make guidelines (the *Cost Allocation Guidelines*) relating to the preparation by a *Transmission Network Service Provider* of its *Cost Allocation Methodology*.

(b) The *Cost Allocation Guidelines*:

(1) must give effect to and be consistent with the *Cost Allocation Principles*; and

(2) may be amended by the *AER* from time to time in accordance with the *transmission consultation procedures*.

(c) Without limiting the generality of paragraph (b), the *Cost Allocation Guidelines* may specify:

(1) the format of a *Cost Allocation Methodology*;

(2) the detailed information that is to be included in a *Cost Allocation Methodology*;

(3) the categories of *transmission services* which are to be separately addressed in a *Cost Allocation Methodology*, such categories being determined by reference to the nature of those services, the persons to whom those services are provided or such other factors as the *AER* considers appropriate; and

(4) the allocation methodologies which are acceptable and the supporting information that is to be included in relation to such methodologies in a *Cost Allocation Methodology*.

(d) The *AER* may, from time to time and in accordance with the *transmission consultation procedures*, amend or replace the *Cost Allocation Guidelines*.

(e) The *AER* must, in accordance with the *transmission consultation procedures,* develop and *publish* the first *Cost Allocation Guidelines* by 28 September 2007 and there must be *Cost Allocation Guidelines* available at all times after that date.

6A.19.4 Cost Allocation Methodology

(a) Each *Transmission Network Service Provider* must submit to the *AER* for its approval a document setting out its proposed *Cost Allocation Methodology*:

(1) by no later than 28 March 2008; or

(2) in the case of an entity that is not a *Transmission Network Service Provider* as at 28 September 2007, within 6 months of being required to do so by the *AER*.

(b) The *Cost Allocation Methodology* proposed by a *Transmission Network Service Provider* must give effect to and be consistent with the *Cost Allocation Guidelines*.

(c) The *AER* may approve or refuse to approve a *Cost Allocation Methodology* submitted under paragraph (a).

(d) The *AER* must notify the relevant *Transmission Network Service Provider* of its decision to approve or refuse to approve the *Cost Allocation Methodology* submitted to it under paragraph (a) within 6 months of its submission, failing which the *AER* will be taken to have approved it.

(e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Transmission Network Service Provider*, amend the *Cost Allocation Methodology* submitted to it, in which case the *Cost Allocation Methodology* as so amended will be taken to be approved by the *AER*.

(f) A *Transmission Network Service Provider* may amend its *Cost Allocation Methodology* from time to time but the amendment only comes into effect:

(1) 6 months after the submission of the amendment, together with detailed reasons for the amendment, to the *AER* (unless the *AER* approves that amendment earlier, in which case it will come into effect when that earlier approval is given); and

(2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.

(g) A *Transmission Network Service Provider* must amend its *Cost Allocation Methodology* where the amendment is required by the *AER* to take into account any change to the *Cost Allocation Guidelines,* but the amendment only comes into effect:

(1) on the date that the *AER* approves that amendment, or 3 months after the submission of the amendment, whichever is the earlier; and

(2) subject to such changes to the *Cost Allocation Methodology* (including the proposed amendment) as the *AER* notifies to the *Transmission Network Service Provider* within that period, being changes that the *AER* reasonably considers are necessary or desirable as a result of that amendment.

(h) A *Transmission Network Service Provider* must maintain a current copy of its *Cost Allocation Methodology* on its website.

Part H - Transmission Consultation Procedures

6A.20 Transmission consultation procedures

(a) This rule 6A.20 applies wherever the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures*. For the avoidance of doubt, the *transmission consultation procedures*:

(1) are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*; and

(2) are separate from, and (where they are required to be complied with) apply to the exclusion of, the *Rules consultation procedures* under rule 8.9.

(b) If the *AER* or the *AEMC* is required to comply with the *transmission consultation procedures* in making, developing or amending any guidelines, models or schemes, or in reviewing any values or methodologies, it must *publish:*

(1) the proposed guideline, model, scheme, amendment or revised value or methodology;

(2) an explanatory statement that sets out the provision of the *Rules* under or for the purposes of which the guideline, model, scheme or amendment is proposed to be made or developed or the value or methodology is required to be reviewed, and the reasons for the proposed guideline, model, scheme, amendment or revised value or methodology; and

(3) an invitation for written submissions on the proposed guideline, model, scheme, amendment or revised value or methodology.

(c) The invitation must allow no less than 30 *business days* for the making of submissions, and the *AER* or the *AEMC* is not required to consider any submission made pursuant to that invitation after this time period has expired.

(d) The *AER* or the *AEMC* may publish such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed guideline, model, scheme, amendment or revised value or methodology as it considers appropriate.

(e) Within 80 *business days* of *publishing* the documents referred to in paragraph (b), the *AER* or the *AEMC* must *publish*:

(1) its final decision on the guideline, model, scheme, amendment, value or methodology that sets out:

(i) the guideline, model, scheme, amendment or revised value or methodology (if any);

(ii) the provision of the *Rules* under which or for the purposes of which the guideline, model, scheme or amendment is being made or developed or the value or methodology is being reviewed; and

(iii) the reasons for the guideline, model, scheme, amendment value or methodology; and

(2) notice of the making of the final decision on the guideline, model, scheme, amendment, value or methodology.

(f) Subject to paragraph (c), the *AER* or the *AEMC* must, in making its final decision referred to in paragraph (e)(1), consider any submissions made pursuant to the invitation for submissions referred to in paragraph (b)(3), and the reasons referred to in paragraph (e)(1)(iii) must include:

(1) a summary of each issue raised in those submissions that the *AER* or the *AEMC* reasonably considers to be material; and

(2) the *AER*'s or the *AEMC's* response to each such issue.

Part I - Ring-Fencing Arrangements for Transmission Network Service Providers

6A.21 Transmission Ring-Fencing Guidelines

6A.21.1 Compliance with Transmission Ring-Fencing Guidelines

All *Transmission Network Service Providers* including *Market Network Service Providers*, must comply with the *Transmission Ring-Fencing Guidelines* prepared in accordance with clause 6A.21.2 as from the time that any *jurisdictional derogation* from this rule 6A.21 ceases to apply in respect of the *participating jurisdiction* in which the *Transmission Network Service Provider* is located.

6A.21.2 Development of Transmission Ring-Fencing Guidelines

(a) *Transmission Ring-fencing guidelines* must be developed by the *AER* in consultation with each *participating jurisdiction* for the accounting and functional separation of the provision of *prescribed transmission services* by *Transmission Network Service Providers* from the provision of other services by *Transmission Network Service Providers* (the '*Transmission Ring-Fencing Guidelines*').

(b) The *Transmission Ring-Fencing Guidelines* may include, but are not limited to:

(1) provisions defining the need for and extent of:

(i) legal separation of the entity through which a *Transmission Network Service Provider* provides *network services* from any other entity through which it conducts business;

(ii) the establishment and maintenance of consolidated and separate accounts for *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;

(iii) allocation of costs between *prescribed transmission services* and other services provided by the *Transmission Network Service Provider*;

(iv) limitations on the flow of information between the *Transmission Network Service Provider* and any other person; and

(v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Transmission Network Service Provider's* business which provide *prescribed transmission services* and parts of the provider's business which provide any other services; and

(2) provisions allowing the *AER* to add to or to waive a *Transmission Network Service Provider's* obligations under the *Transmission Ring-Fencing Guidelines*.

(c) In developing the *Transmission Ring-Fencing Guidelines* the *AER* must consider, without limitation, the following matters:

(1) the need, so far as practicable, for consistency with Federal and State regulation in each *participating jurisdiction* of ring-fencing requirements of other utility businesses; and

(2) the need, so far as practicable, for consistency between the *Transmission Ring-Fencing Guidelines* and *Distribution Ring-Fencing Guidelines*.

(d) In developing or amending the *Transmission Ring-Fencing Guidelines*, the *AER* must consult with *participating jurisdictions*, *Registered Participants*, *AEMO* and other *interested parties*, and such consultation must be otherwise in accordance with the *transmission consultation procedures*.

(e) To avoid doubt, despite paragraphs (a), (b), (c) and (d) above and clause 6A.19.2(6), the *Transmission Ring-Fencing Guidelines* must not include any provisions which deal with or require the allocation of costs as between:

(1) *prescribed transmission services* and *negotiated transmission services*; or

(2) *categories of prescribed transmission services,*

in a manner which is inconsistent with the *Cost Allocation Principles*, the *Cost Allocation Guidelines*, the *Pricing Principles for Prescribed Transmission Services* or the *pricing methodology guidelines*.

Part J – Prescribed Transmission Services - Regulation of Pricing

6A.22 Terms used in Part J

6A.22.1 Aggregate annual revenue requirement (AARR)

For the purposes of this Part J, the *aggregate annual revenue requirement* (*AARR*) for *prescribed transmission services* provided by a *Transmission Network Service Provider*, is the *maximum allowed revenue* referred to in clause 6A.3.1 adjusted:

(1) in accordance with clause 6A.3.2, and

(2) by subtracting the operating and maintenance costs expected to be incurred in the provision of *prescribed common transmission services*.

6A.22.2 Annual service revenue requirement (ASRR)

For the purposes of this Part J, the *annual service revenue requirement (ASRR)* for a *Transmission Network Service Provider* is the portion of the *AARR* for *prescribed transmission services* provided by a *Transmission Network Service Provider* that is allocated to each *category of prescribed transmission services* for that provider and that is calculated by multiplying the *AARR* by the *attributable cost share* for that category of services in accordance with the principles in clause 6A.23.2.

6A.22.3 Meaning of attributable cost share

(a) For a *Transmission Network Service Provider* for a *category of prescribed transmission services*, the *attributable cost share* for that provider for that category of services must, subject to any adjustment required under the principles in clause 6A.23.2, substantially reflect the ratio of:

(1) the costs of the *transmission system* assets directly attributable to the provision of that *category of prescribed transmission services*; to

(2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed transmission services*.

(b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.22.4 Meaning of attributable connection point cost share

(a) For a *Transmission Network Service Provider* for *prescribed entry services* and *prescribed exit services*, the *attributable connection point cost share* for that provider for each of those categories of services must substantially reflect the ratio of:

(1) the costs of the *transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services,* respectively, at a *transmission network connection point*; to

(2) the total costs of all the *Transmission Network Service Provider's transmission system* assets directly attributable to the provision of *prescribed entry services* or *prescribed exit services*, respectively.

(b) The costs of the *transmission system* assets referred to in paragraph (a) refers to optimised replacement cost or to an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

6A.23 Pricing Principles for Prescribed Transmission Services

6A.23.1 Introduction

(a) This rule 6A.23 sets out the principles that constitute the *Pricing Principles for Prescribed Transmission Services*.

(b) The *Pricing Principles for Prescribed Transmission Services* are given effect by *pricing methodologies.*

6A.23.2 Principles for the allocation of the AARR to categories of prescribed transmission services

The *aggregate annual revenue requirement* for *prescribed transmission services* provided by a *Transmission Network Service Provider* is to be allocated in accordance with the following principles:

(a) The *AARR* for a *Transmission Network Service Provider* must be allocated to each *category of prescribed transmission services* in accordance with the *attributable cost share* for each such category of services.

(b) This allocation results in the *annual service revenue requirement* (*ASRR*) for that category of services.

(c) The allocation of the *AARR* must be such that:

(1) every portion of the *AARR* is allocated; and

(2) the same portion of the *AARR* is not allocated more than once.

(d) Where, as a result of the application of the *attributable cost share*, a portion of the *AARR* would be attributable to more than one category of *prescribed transmission services,* that *attributable cost share* is to be adjusted and applied such that any costs of a *transmission system* asset that would otherwise be attributed to the provision of more than one category of *prescribed transmission services*, is allocated as follows:

(1) to the provision of *prescribed TUOS services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;

(2) if any portion of the costs of a *transmission system* asset is not allocated to *prescribed TUOS services*, under subparagraph (1), that

portion is to be allocated to *prescribed common transmission services*, but only to the extent of the *stand-alone amount* for that *category of prescribed transmission services*;

(3) if any portion of the costs of a *transmission system* asset is not attributed to *prescribed transmission services* under subparagraphs (1) and (2), that portion is to be attributed to *prescribed entry services* and *prescribed exit services.*

6A.23.3 Principles for the allocation of the ASRR to transmission network connection points

The *annual service revenue requirement* for a *Transmission Network Service Provider* for each *category of prescribed transmission services* is to be allocated to each *transmission network connection point* in accordance with the following principles:

(a) The whole of the *ASRR* for *prescribed entry services* is to be allocated to *transmission network connection points* in accordance with the *attributable connection point cost share* for *prescribed entry services* that are provided by the *Transmission Network Service Provider* at that *connection point*.

(b) The whole of the *ASRR* for *prescribed exit services* is to be allocated to *transmission network connection points* in accordance with the *attributable connection point cost share* for *prescribed exit services* that are provided by the *Transmission Network Service Provider* at that *connection point*.

(c) Subject to paragraph (e), the *ASRR* for *prescribed TUOS services* is to be allocated to *transmission network connection points* of *Transmission Customers* in the following manner:

(1) a share of the *ASRR* (the **locational component**) is to be adjusted by subtracting the estimated *auction amounts* expected to be distributed to the *Transmission Network Service Provider* under clause 3.18.4 from the *connection points* for each relevant *directional interconnector* and this adjusted share is to be allocated as between such *connection points* on the basis of the estimated proportionate use of the relevant *transmission system* assets by each of those customers, and the *CRNP methodology* and *modified CRNP methodology* represent two permitted means of estimating proportionate use;

(2) the remainder of the *ASRR* (the **pre-adjusted non-locational component**) is to be adjusted:

(i) by subtracting the amount (if any) referred to in paragraph (e);

(ii) by subtracting or adding any remaining *settlements residue* (not being *settlements residue* referred to in sub paragraph (1) but

including the portion of *settlements residue* due to *intra-regional loss factors*) which is expected to be distributed or recovered (as the case may be) to or from the *Transmission Network Service Provider* in accordance with clause 3.6.5(a);

(iii) for any *over-recovery amount* or *under-recovery amount*;

(iv) for any amount arising as a result of the application of clause 6A.23.4(h) and (i); and

(v) for any amount arising as a result of the application of prudent discounts in clause 6A.26.1(d)-(g),

(the **adjusted non-locational component**) and this adjusted non-locational component is to be recovered in accordance with clause 6A.23.4.

(d) The shares of the *ASRR* referred to in paragraph (c) are to be either:

(1) a 50% share allocated to the locational component referred to in subparagraph (c)(1) and a 50% share allocated to the pre-adjusted non-locational component referred to in subparagraph (c)(2); or

(2) an alternative allocation to each component, that is based on a reasonable estimate of future *network* utilisation and the likely need for future *transmission* investment, and that has the objective of providing more efficient locational signals to *Market Participants*, *Intending Participants* and end-users.

(e) If the result of the adjustment referred to in paragraph (c)(1) would be a negative locational component for the *connection points* of the relevant *directional interconnector* then the locational component will be deemed to be zero and the absolute value of that negative amount is to be subtracted from the pre-adjusted non-locational component under paragraph (c)(2)(i).

(f) The *ASRR* for *prescribed common transmission services* and the operating and maintenance costs incurred in the provision of those services, are to be recovered through prices charged to *Transmission Customer* and *Network Service Provider transmission network connection points* set in accordance with clause 6A.23.4.

6A.23.4 Price structure principles

(a) A *Transmission Network Service Provider* is to develop separate prices for the recovery of the *ASRR* in accordance with the principles set out in paragraphs (b)-(i).

(b) Separate prices are to be developed for each *category of prescribed transmission services*, being:

(1) *prescribed entry services*;

(2) *prescribed exit services*;

(3) *prescribed common transmission services*;

(4) *prescribed TUOS services* – locational component; and

(5) *prescribed TUOS services* – the adjusted non-locational component.

(c) Prices for *prescribed entry services* and *prescribed exit services* must be a fixed annual amount.

(d) Prices for prescribed common transmission services must be on a postage-stamp basis.

(e) Prices for recovering the locational component of providing prescribed TUOS services must be based on demand at times of greatest utilisation of the transmission network and for which network investment is most likely to be contemplated.

(f) Subject to paragraphs (g), (h), and (i), prices for recovering the locational component of the ASRR for the provision of prescribed TUOS services must not change by more than 2 per cent per annum compared with the load weighted average price for this component for the relevant region.

(g) The change in price referred to in paragraph (f) may exceed 2 per cent per annum if, since the last time prices were set:

(1) the *load* at the *connection point* has materially changed;

(2) in connection with that change, the *Transmission Customer* requested a renegotiation of its *connection agreement* with the *Transmission Network Service Provider*; and

(3) the *AER* has approved the change of more than 2 per cent per annum.

(h) If, in the case of an increase in price, the application of paragraph (f) would result in the under-recovery of part of the locational component of the *ASRR* in charges for *prescribed TUOS services,* any shortfall may be recovered by adjusting upward the charges that would otherwise apply in respect of the adjusted non-locational component of *prescribed TUOS services*.

(i) If, in the case of a decrease in price, the application of paragraph (f) would result in over-recovery of the locational component of the *ASRR* through charges for *prescribed TUOS services,* any over-recovery must be offset by adjusting downward the charges that would otherwise apply in respect of the adjusted non-locational component of *prescribed TUOS services*.

(j) Prices for recovering the adjusted non-locational component of *prescribed TUOS services* must be on a *postage-stamp* basis.

6A.24 Pricing methodology

6A.24.1 Pricing methodologies generally

(a) In making a *transmission determination* under Part E of this Chapter 6A, the *AER* must include a decision to approve a proposed *pricing methodology* as part of that *transmission determination*, in accordance with that Part.

(b) A *pricing methodology* is a methodology, formula, process or approach that, when applied by a *Transmission Network Service Provider*:

(1) allocates the *aggregate annual revenue requirement* for *prescribed transmission services* provided by that provider to:

(i) the *categories of prescribed transmission service*s for that provider; and

(ii) *transmission network connection points* of *Transmission Network Users*; and

(2) determines the structure of the prices that a *Transmission Network Service Provider* may charge for each of the *categories of prescribed transmission services* for that provider.

(c) The *pricing methodology* proposed by a *Transmission Network Service Provider* and approved by the *AER* in accordance with Part E of this Chapter 6A must:

(1) give effect to and be consistent with the *Pricing Principles for Prescribed Transmission Services*; and

(2) comply with the requirements of, and contain or be accompanied by such information as is required by, the *pricing methodology guidelines* made for that purpose under rule 6A.25.

(d) A *Transmission Network Service Provider* must comply with the *pricing methodology* approved by the *AER* as part of a *transmission determination* that applies to that provider, and any other applicable requirements in the *Rules*, when the provider is setting the prices that may be charged for the provision of *prescribed transmission services*.

(e) Subject to clause 6A.24.3, a *pricing methodology* applies for the duration of the relevant *regulatory control period*.

(f) Subject to rule 6A.15, a *pricing methodology* may not be amended during the *regulatory control period*.

6A.24.2 Publication of pricing methodology and transmission network prices

A *Transmission Network Service Provider* must *publish*:

(a) a current copy of its *pricing methodology* on its website; and

(b) the prices for each of the *categories of prescribed transmission services* to apply for the following *financial year*, by 15 May each year for the purposes of determining *distribution service* prices.

6A.24.3 Basis for setting prices pending approval of pricing methodology

(a) This clause 6A.24.3 applies where:

(1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;

(2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13 by a date that is 3 months prior to the commencement of the first *financial year* that a methodology referred to in subparagraph (1) would, if approved, apply (the **first pricing year**); and

(3) the provider is reasonably required to commence the process of setting prices for the first pricing year.

(b) Despite clause 6A.24.1(d), a *Transmission Network Service Provider* must set prices for the first pricing year in accordance with:

(1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology* - that proposed *pricing methodology*;

(2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1);

(3) if there is no previously approved *pricing methodology* for that *Transmission Network Service Provider,* the previous method used by the *Transmission Network Service Provider* to establish prices, however determined, must be used in place of an approved *pricing methodology*.

(c) Despite the *AER* subsequently approving a *pricing methodology* for a *Transmission Network Service Provider*:

(1) the approved *pricing methodology* applies to the setting of prices for the year after the first pricing year and for the remainder of the relevant *regulatory control period;* and

(2) the provider is not required to adjust, reverse or recompense any amounts to *Transmission Network Users* or their customers in connection with charges for services established pursuant to this clause 6A.24.3.

6A.24.4 Basis for setting prices pending approval of maximum allowed revenue

(a) This clause 6A.24.4 applies where:

(1) a *Transmission Network Service Provider* has submitted or resubmitted a *Revenue Proposal* under clause 6A.10.1, 6A.11.2 or 6A.12.3;

(2) the *AER* has not made a final decision on that *Revenue Proposal* under rule 6A.13 by a date that is three months prior to the commencement of the first *financial year* that a *Revenue Proposal* referred to in subparagraph (1) would, if approved, apply (the **first pricing year**); and

(3) the *Transmission Network Service Provider* is reasonably required to commence the process of setting prices for the first pricing year referred to in subparagraph (2)

(b) Despite any other applicable requirements in the *Rules*, a *Transmission Network Service Provider* may set prices for the first pricing year referred to in clause 6A.24.4(a)(2) in accordance with:

(1) in the case where the *AER* has made a draft decision in which it proposes to approve the proposed *maximum allowed revenue* for the first pricing year referred to in clause 6A.24.4(a)(2), that proposed *maximum allowed revenue* amount; or

(2) in the case where the *AER* has made a draft decision in which it has refused to approve the proposed *maximum allowed revenue* for the first pricing year referred to in clause 6A.24.4(a)(2), the *maximum allowed revenue* for the first pricing year that the *AER* has proposed for that amount in the draft decision made under clause 6A.12.1.

(c) For the avoidance of doubt, any *over-recovery amount* or *under-recovery amount* arising from the application of this clause 6A.24.4 is to be treated in accordance with clause 6A.23.3(c)(2)(iii).

6A.25 Pricing methodology guidelines for prescribed transmission services

6A.25.1 Making and amending of pricing methodology guidelines

(a) The *AER* must, in accordance with the *transmission consultation procedures*, make guidelines (the *pricing methodology guidelines*) relating to the preparation by a *Transmission Network Service Provider* of a proposed *pricing methodology*.

(b) The *pricing methodology guidelines*:

(1) must give effect to, and be consistent with, the *Pricing Principles for Prescribed Transmission Services*;

(2) may be amended or replaced by the *AER* from time to time in accordance with the *transmission consultation procedures*; and

(3) must be *published* by the *AER*.

(c) The *AER* must develop and publish the first *pricing methodology guidelines* by 31 October 2007 and there must be *pricing methodology guidelines* in force at all times after that date.

(d) In the event of an inconsistency between the *Rules* and the *pricing methodology guidelines*, the *Rules* prevail to the extent of that inconsistency.

6A.25.2 Contents of pricing methodology guidelines

The *pricing methodology guidelines* must specify or clarify:

(a) the information that is to accompany a proposed *pricing methodology* being information that is necessary to allow the *AER* to form a view as to whether the proposed methodology is consistent with and gives effect to, the *Pricing Principles for Prescribed Transmission Services* and the requirements of this Part J;

(b) permitted pricing structures for recovery of the locational component of providing *prescribed TUOS services* under clause 6A.23.4(e), having regard to:

(1) the desirability of consistent pricing structures across the *NEM*; and

(2) the role of pricing structures in signaling efficient investment decisions and *network* utilisation decisions;

(c) in relation to prices set on a *postage-stamp* basis, permissible postage stamping structures for the prices for *prescribed common transmission services* and the recovery of the adjusted non-locational component of providing *prescribed TUOS services* having regard to;

(1) the desirability of a consistent approach across the *NEM,* particularly for *Transmission Customers* that have operations in multiple *participating jurisdictions*; and

(2) the desirability of signaling to actual and potential *Transmission Network Users* efficient investment decisions and *network* utilisation decisions.

(d) the types of *transmission system assets* that are directly attributable to each *category of prescribed transmission services*, having regard to the desirability of consistency of cost allocation across the *NEM*; and

(e) those parts (if any) of a proposed *pricing methodology* or the information accompanying it, that will not be publicly disclosed without the consent of the *Transmission Network Service Provider*.

6A.26 Prudent discounts

6A.26.1 Agreements for prudent discounts for prescribed transmission services

(a) Subject to this clause 6A.26.1, the prices for *prescribed transmission services* that are determined in accordance with the *pricing methodology* of a *Transmission Network Service Provider*, are the maximum prices that a provider is entitled to charge for the provision of the relevant *prescribed transmission services*.

(b) A *Transmission Network Service Provider* may, but is not required to, agree with a *Transmission Customer* (the **beneficiary**) to charge lower prices for *prescribed TUOS services* and *prescribed common transmission services* provided to that beneficiary, than the prices determined in accordance with the provider's *pricing methodology*.

(c) Where a *Transmission Customer* requests a *Transmission Network Service Provider* to charge that user reduced charges for *prescribed TUOS services* or *prescribed common transmission services* (**reduced charges**), the *Transmission Network Service Provider* must negotiate in good faith.

(d) Subject to this clause 6A.26.1, a *Transmission Network Service Provider* that agrees to charge a beneficiary reduced charges**,** may recover the

difference between the revenue that would be recovered by the application of the maximum prices referred to in paragraph (a) and the reduced charges (the **discount amount**) from either or both charges:

(1) to other *Transmission Customers* for the adjusted non-locational component of *prescribed TUOS services;* and

(2) for *prescribed common transmission services,*

in accordance with the provider's *pricing methodology*.

(e) A *Transmission Network Service Provider* may recover up to 70 per cent of a discount amount through the charges referred to in subparagraphs (d)(1) and (2).

(f) A Transmission Network Service Provider may recover greater than 70 percent of the discount amount if:

(1) the discount amount is no larger than that necessary to prevent the charges referred to in subparagraphs (d)(1) and (2) altering the beneficiary's behaviour to the point of adopting the most attractive alternative in place of the course of action the beneficiary would have adopted if no such charges were levied; and

(2) the giving of the discount would not place other customers of the *Transmission Network Service Provider* in a worse position than if the discount was not offered.

(g) Where for any reason the *Transmission Network Service Provider* does not recover the proportion of a discount amount that the provider is entitled to recover from other *Transmission Customers* under this clause in the *financial year* in which the reduced charges apply, the *Transmission Network Service Provider* may recover the difference through the charges for the adjusted non-locational component of *prescribed TUOS services* to apply in a subsequent *financial year*, in accordance with the provider's *pricing methodology*.

6A.26.2 Application to AER for approval of proposed prudent discount amounts

(a) This clause applies where a *Transmission Network Service Provider* has agreed or proposes to agree, to reduced charges in accordance with clause 6A.26.1 and seeks to recover greater than 70 per cent of the discount amount through the charges referred to in clause 6A.26.1(d) to its other *Transmission Customers* (the **proposed recovery amount**).

(b) A *Transmission Network Service Provider* may apply to the *AER* for approval to recover the proposed recovery amount.

(c) A *Transmission Network Service Provider* seeking approval must submit to the *AER* a written application in accordance with any relevant requirements of the *information guidelines* in force under clause 6A.17.2.

(d) If the *AER* determines that the requirements of clause 6A.26.1(f) are satisfied, the *AER* may approve the recovery of the proposed recovery amount, taking into account the matters referred to in paragraph (i).

(e) If the *AER* determines that the requirements of clause 6A.26.1(f) are not satisfied, the *AER* may refuse the recovery of the proposed recovery amount, and must set out its reasons.

(f) If the *AER* does not make a decision referred to in paragraph (d) or (e) within 60 *business days* from the date it receives the *Transmission Network Service Provider's* application and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have approved the recovery of the proposed recovery amount.

(g) A *Transmission Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraphs (d) or (e) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

(h) Before making a determination under paragraph (d) or (e), the *AER* may consult with the relevant *Transmission Network Service Provider* and such other persons as the *AER* considers appropriate, on any matters arising out of an application to recover a proposed recovery amount as the *AER* considers appropriate.

Relevant factors

(i) In making a determination under paragraph (d) or (e), the *AER* must take into account:

(1) the matters and proposals set out in the application referred to in paragraph (c);

(2) the requirements of clause 6A.26.1(f); and

(3) any other factors the *AER* considers relevant.

(j) If the *AER* approves or is taken to approve recovery of the proposed recovery amount under paragraph (d) or (f), that approval is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated, except where the *Transmission Network Service Provider* has provided information in its application that was materially false or misleading.

(k) Where a *Transmission Network Service Provider* agrees to charge reduced charges in accordance with clause 6A.26.1, and no approval is granted under this clause 6A.26.2, the *AER* must review the discount amount in the course of making a subsequent *revenue determination* for that provider, and if the recovery of any part of the discount amount does not comply with clause 6A.26.1(f), the *AER* may adjust (with interest) the *total revenue cap* of the *Transmission Network Service Provider* for the following *regulatory control period* in respect of the total amount that has been earned by the *Transmission Network Service Provider* and does not satisfy the requirements under the *Rules*.

6A.27 Billing Process

This rule describes the manner in which *Transmission Network Users* are billed for *prescribed transmission services* and how payments for those services are made.

6A.27.1 Billing for prescribed transmission services

(a) For each *connection point* on its *transmission networks*, a *Transmission Network Service Provider* must calculate the *transmission service* charges payable by *Transmission Network Users* in accordance with the *transmission service* prices published under clause 6A.24.2.

(b) A *Transmission Network Service Provider* must issue a bill to *Transmission Network Users* for *prescribed transmission services*.

(c) Where the billing for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known and, where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

(d) Where charges are to be determined for *prescribed transmission services* from *metering data*, these charges must be based on kW or kWh obtained from the *metering data* managed by *AEMO*.

6A.27.2 Minimum information to be provided in network service bills

(a) The following is the minimum information that must be provided with a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Network User*:

(1) the *connection point* identifier;

(2) the dates on which the *billing period* starts and ends;

(3) the identifier of the published *transmission service* price from which the *connection point* charges are calculated;

(4) measured quantities, billed quantities, agreed quantities, prices and amounts charged for each component of the total *transmission service* account.

(b) In addition to the minimum information requirements set out in paragraph (a), a bill for a *connection point* issued by a *Transmission Network Service Provider* directly to a *Transmission Customer* must separately identify, for the total amount levied in relation to *prescribed TUOS services* in the *billing period* for that *connection point* each of the following components:

(1) charges for the locational and the adjusted non-locational component of *prescribed TUOS services*;

(2) charges for *prescribed common transmission services.*

6A.27.3 Obligation to pay charges for prescribed transmission services

A *Transmission Network User* must pay charges for *prescribed transmission services* properly charged to it and billed in accordance with the *pricing methodology* of the relevant *Transmission Network Service Provider* by the date specified in the bill.

6A.27.4 Payments between Transmission Network Service Providers

(a) Each *Transmission Network Service Provider* must pay to each other relevant *Transmission Network Service Provider* the revenue which is estimated to be collected during the following year by the first provider as charges for *prescribed transmission services* for the use of *transmission systems* owned by those other *Transmission Network Service Providers*.

(b) Payments to be made between *Transmission Network Service Providers* within a *region* under paragraph (a) must be determined by the *Co-ordinating Network Service Provider* for that *region*.

(c) Financial transfers payable under this clause 6A.27.4 must be paid in equal monthly instalments.

6A.27.5 Calculation of financial transfers between Transmission Network Service Providers

(a) If the *prescribed transmission use of system* revenue allocation and price and charge calculation under the *pricing methodology* of a *Transmission Network Service Provider* result in the allocation of some of a provider's revenue to a *Transmission Customer* in relation to a *connection point* with

another *Network Service Provider* then financial transfers between *Network Service Providers* must be made in accordance with paragraph (b).

(b) Financial transfers referred to in paragraph (a) must be determined by the *Co-ordinating Network Service Provider* as a fixed annual amount for the next *financial year*. The *survey period* for this allocation is the most recent full *financial year* for which operating data is available.

6A.28 Prudential Requirements

This rule sets out the arrangements by which *Transmission Network Service Providers* may minimise financial risks associated with investment in *transmission network* assets.

6A.28.1 Prudential Requirements for prescribed transmission services

A *Transmission Network Service Provider* may require a *Transmission Network User* to establish prudential requirements for either or both *connection services* and *transmission use of system services.* These prudential requirements may take the form of, but need not be limited to, capital contributions, pre-payments or financial guarantees.

6A.28.2 Capital contribution or prepayment for a specific asset

Where the *Transmission Network Service Provider* is required to construct specific assets to provide *connection service* or *transmission use of system service* to a *Transmission Network User*, the provider may require that user to make a capital contribution or prepayment for all or part of the cost of the new assets installed and any contribution made must be taken into account in the determination of *transmission service* prices applicable to that user.

6A.28.3 Treatment of past capital contributions

(a) The treatment of capital contributions for *connection service* and/or *transmission use of system service* made prior to 13 December 1998, by *Transmission Network Users* must be in accordance with any contractual arrangements with the relevant *Transmission Network Service Providers* applicable at that time.

(b) Where contractual arrangements referred to in paragraph (a) are not in place, the treatment of past capital contributions for *connection service* and/or *transmission use of system service* must be negotiated by the *Transmission Network Service Provider* and the *Transmission Network User* and, if a dispute arises and cannot be resolved, the matter must be referred to the *AER*.

6A.29 Multiple Transmission Network Service Providers

6A.29.1 Multiple Transmission Network Service Providers within a region

(a) If *prescribed transmission services* within a *region* are provided by more than one *Transmission Network Service Provider*, the providers within that *region* (the **appointing providers)** must appoint a *Co-ordinating Network Service Provider* who is responsible for the allocation of all relevant *AARR* within that *region*, in accordance with this Part J.

(b) Each *Transmission Network Service Provider* must determine the *AARR* for its own *transmission system* assets which are used to provide *prescribed transmission services* within each *region*.

(c) To make the allocation referred to in paragraph (a), the *Co-ordinating Network Service Provider* must use the total *AARR* of all *Transmission Network Service Providers* providing *prescribed transmission services* within the relevant *region*.

(d) The *Co-ordinating Network Service Provider* is responsible for making the allocation referred to in paragraph (a), in accordance with its *pricing methodology*, in relation to *Transmission Network Users'* and *Transmission Network Service Providers' transmission network connection points* located within the *region* and an appointing provider is not required to address the matters specified in rule 6A.24.1(b)(1) when preparing its *pricing methodology*.

(e) Each *Transmission Network Service Provider* within a *region* must promptly provide information reasonably requested by the *Co-ordinating Network Service Provider* for that *region* to enable the proper performance of the co-ordination function.

(f) The *Co-ordinating Network Service Provider* must provide sufficient information to an appointing provider to enable that provider:

(1) to understand the basis for the allocation referred to in paragraphs (a) and (d); and

(2) to prepare its *pricing methodology* and replicate the pricing allocation.

6A.29.2 Single Transmission Network Service Provider within a region

If *prescribed transmission services* within a *region* are provided by only one *Transmission Network Service Provider*, that provider is responsible for allocation of the *AARR* within that *region* and must liaise with the *Transmission Network Service Provider* similarly responsible in any other *interconnected regions.*

6A.29.3 Allocation over several regions

(a) The *Transmission Network Service Providers* responsible for the allocation of the *AARR* within a *region* may agree with one or more other such providers for *interconnected regions* to undertake the allocations of *AARR* as one allocation over all of those *regions*.

(b) To make an allocation over several *regions*, the sum of the *AARR* of all *Transmission Network Service Providers* providing *prescribed transmission services* within those *regions* must be used.

Part K Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services

6A.30 Commercial arbitration for prescribed and negotiated transmission services

This Part K applies to any dispute which may arise between a *Transmission Network Service Provider* (a provider) and a *Service Applicant* (an applicant) as to *terms and conditions of access* as referred to in clause 6A.1.2, for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* ('a *transmission services access dispute*').

6A.30.1 Notification of transmission services dispute

(a) A provider or an applicant may notify the *AER* in writing that a *transmission services access dispute* exists.

(b) On receiving a notification under paragraph (a), the *AER* must give notice in writing of the dispute to the other party to the dispute.

(c) A provider or an applicant who has given notice of a dispute under paragraph (a) may withdraw notification of the dispute at any time by written notice to the *AER* and the other party to the dispute.

(d) If the notification of a dispute is withdrawn under paragraph (c), it is taken for the purposes of this clause 6A.30.1 to never have been given.

6A.30.2 Appointment of commercial arbitrator

(a) On receiving a notification under clause 6A.30.1(a), the *AER* must request the provider and the applicant, by a time specified by the *AER*, to nominate to the *AER* two persons each for appointment as the *commercial arbitrator*

to determine the *transmission services access dispute*. The provider and applicant may make the nominations.

(b) As soon as practicable after the expiry of the time specified by the *AER* under paragraph (a), the *AER* must appoint:

(1) one of the persons (if any) nominated to the *AER* by the provider or the applicant under paragraph (a); or

(2) if neither the provider or the applicant nominate any such person within the time specified by the *AER* under paragraph (a) or all of the persons so nominated do not qualify for appointment under paragraph (d) or are not eligible for appointment under paragraph (e), a person determined by the *AER*,

as the *commercial arbitrator* to determine the dispute, and must refer the dispute to that *commercial arbitrator*.

(c) A decision of the *AER* as to the appointment of the *commercial arbitrator* is final and binding on the provider and the applicant.

(d) The *AER* may only appoint a person as the *commercial arbitrator* if that person is experienced or trained in dispute resolution techniques.

(e) A person is not eligible for appointment as the *commercial arbitrator* if that person has any interest that may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where the person who is appointed as the *commercial arbitrator* becomes aware of such conflict after that person commences the hearing of the dispute, the person must advise the parties to that effect.

(f) Where:

(1) the provider or the applicant believes that the person appointed as the *commercial arbitrator* has an interest which may conflict with the impartial resolution of the dispute; or

(2) the person appointed as the *commercial arbitrator* discloses the existence of such an interest,

the person must not continue to hear and determine the dispute, except with the written consent of the provider and the applicant.

6A.30.3 Procedures of commercial arbitrator

(a) The *commercial arbitrator* may give to the parties such directions as it considers necessary:

(1) for the proper conduct of the proceedings, including in relation to the provision of documents and information to the other party and the making of oral and written submissions;

(2) relating to the use and disclosure of information obtained from the other party to the dispute (including a direction to keep information confidential); and

(3) in relation to the participation (if any) of legal representatives of the parties in the proceedings.

(b) The *commercial arbitrator* must observe the rules of procedural fairness, but is not bound by the rules of evidence and may inform itself in any manner it thinks fit.

6A.30.4 Powers of commercial arbitrator in determining transmission services access disputes

(a) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of *prescribed transmission services* the *commercial arbitrator* must apply:

(1) in relation to price, the *pricing methodology* of the relevant *Transmission Network Service Provider* approved by the *AER* under Part E and Part J of this Chapter 6A of the *Rules*;

(2) in relation to other terms and conditions, Chapters 4, 5 and this Chapter 6A of the *Rules*; and

(3) in relation to all *terms and conditions of access* (including price) the decision of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and this Chapter 6A of the *Rules*.

(b) In determining a *transmission services access dispute* in relation to the *terms and conditions of access* for the provision of a *negotiated transmission service* the *commercial arbitrator* must apply:

(1) in relation to price (including *access charges*) for the provision of that service by the provider, the *Negotiated Transmission Service Criteria* that are applicable to that dispute, in accordance with the relevant *transmission determination*;

(2) in relation to other terms and conditions, the *Negotiated Transmission Service Criteria* that are applicable to that dispute, and Chapters 4, 5 and this Chapter 6A of the *Rules*; and

(3) in relation to all *terms and conditions of access* (including price) the decision of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5 and this Chapter 6A of the *Rules*.

and must have regard:

(4) to the relevant *negotiating framework* prepared by the *Transmission Network Service Provider* under clause 6A.9.5 and approved by the *AER*.

(c) In determining a *transmission services access dispute* in relation to the *terms and conditions of acc*ess for the provision of *negotiated transmission services* a *commercial arbitrator* may:

(1) have regard to other matters which the *commercial arbitrator* considers relevant.

(2) hear evidence or receive submissions from *AEMO* and *Transmission Network Users* notified and consulted under the *Transmission Network Service Provider's negotiating framework*.

(d) In determining a *transmission services access dispute* in relation to the *terms and conditions of acc*ess for the provision of *prescribed transmission services* a *commercial arbitrator* may:

(1) have regard to other matters which the *commercial arbitrator* considers relevant.

(2) hear evidence or receive submissions from *AEMO* in relation to *power system security* matters and from *Transmission Network Users* who may be adversely affected.

6A.30.5 Determination of transmission services access disputes

(a) Subject to paragraph (c), the *commercial arbitrator* must determine the dispute as quickly as possible, and in any case it must do so within 30 *business days* after the dispute is referred to the *commercial arbitrator*.

(b) The determination of the *commercial arbitrator*:

(1) may direct the provision of *prescribed transmissions services* and *negotiated transmission services* in accordance with Chapters 4, 5 and this Chapter 6A of the *Rules*;

(2) may specify, for a *negotiated transmission service,* a price or charge in such a way that it is or is to be adjusted over time.

Note: An adjustment as referred to in subparagraph (2) may, for example, be appropriate where the cost of providing the negotiated transmission service to a Service

Applicant changes because the assets used to provide that service are subsequently used to provide a service to another person and the payment for the service by that other person enables the Transmission Network Service Provider to recoup some of those costs from that other person.

(c) The *commercial arbitrator* may extend the period referred to in paragraph (a) if the provider and the applicant so agree in writing.

(d) The *commercial arbitrator* may at any time terminate the proceedings without making a decision if it considers that:

(1) the dispute is misconceived or lacking in substance;

(2) the notification of the dispute to the *AER* under clause 6A.30.1(a) was vexatious; or

(3) the party who notified the dispute to the *AER* under clause 6A.30.1(a) has not negotiated in good faith or has notified the dispute prematurely or unreasonably.

(e) The *commercial arbitrator* must terminate the proceedings without making a decision if at any time, whether on application by the provider or the applicant or otherwise, the arbitrator determines that the *transmission service* is capable of being provided on a genuinely competitive basis by a person other than the *Transmission Network Service Provider* or an entity which is associated with the provider.

6A.30.5 Costs of dispute

(a) The fees and costs of the *commercial arbitrator* must be borne equally by the provider and the applicant unless:

(1) paragraph (b) applies; or

(2) otherwise agreed between the provider and the applicant.

(b) The costs of determining the dispute (including the legal costs of either of the parties) may be allocated by the *commercial arbitrator* for payment as between the parties as part of any determination.

(c) In deciding to allocate costs against one of the parties to the dispute, the *commercial arbitrator* may have regard to any relevant matters including (but not limited to) whether the conduct of that party unreasonably prolonged or escalated the dispute or otherwise increased the costs of resolving the dispute.

6A.30.6 Enforcement of agreement or determination and requirement for reasons

(a) Where the provider and the applicant reach agreement (whether or not the matter is before a *commercial arbitrator*), the parties may execute a written agreement recording their resolution of that dispute.

(b) The *commercial arbitrator* must give its decision determining the dispute, together with its reasons for that decision, in writing and must provide a copy of its determination:

(1) to the provider and to the applicant; and

(2) (except to the extent that it contains confidential information) to the *AER* for publication.

(c) An agreement that is executed under paragraph (a) and a determination of the *commercial arbitrator* under paragraph (b) are binding on the provider and the applicant, and any failure to comply with such an agreement or determination is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

6A.30.7 Miscellaneous

(a) To the extent permitted by law, a person who is appointed as a *commercial arbitrator* is not liable for any loss, damage or liability suffered or incurred by any person as a consequence of any act or omission of that person which was done in good faith in connection with the dispute.

(b) A person who is appointed as a *commercial arbitrator* may, before acting in relation to the dispute, require the parties to the dispute (or any one of them) to execute a release and indemnity in relation to any loss, damage or liability that that person would, but for the release or indemnity, suffer or incur as a consequence of any act or omission done in good faith in connection with the dispute.

Schedule 6A.1 - Contents of Revenue Proposals

S6A.1.1 Information and matters relating to capital expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to capital expenditure:

(1) a forecast of the required capital expenditure that complies with the requirements of clause 6A.6.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:

(i) asset class (eg. *transmission lines*, *substations* etc); or

(ii) category driver (eg. *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, business support etc),

and identifies, in respect of proposed material assets:

(iii) the location of the proposed asset;

(iv) the anticipated or known cost of the proposed asset; and

(v) the categories of *transmission services* which are to be provided by the proposed asset;

(2) the methodology used for developing the capital expenditure forecast;

(3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the methodology used for developing those forecasts of load growth;

(4) the key assumptions that underlie the capital expenditure forecast;

(5) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;

(6) capital expenditure for each of the first three *regulatory year*s of the current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory year*s of that *regulatory control period*, categorised in the same way as for the capital expenditure forecast;

(7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure; and

(8) any non-network alternatives considered by the *Transmission Network Service Provider*.

S6A.1.2 Information and matters relating to operating expenditure

A *Revenue Proposal* must contain at least the following information and matters relating to operating expenditure:

(1) a forecast of the required operating expenditure that complies with the requirements of clause 6A.6.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:

(i) particular programs; or

(ii) types of operating expenditure (eg. maintenance, payroll, materials etc),

and identifies in respect of each such category:

(iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and

(iv) the categories of *transmission services* to which that forecast expenditure relates;

(2) the methodology used for developing the operating expenditure forecast;

(3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the methodology used for developing those forecasts of key variables;

(4) the methodology used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *transmission system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Transmission Network Service Provider* in respect of the relevant *regulatory control period*;

(5) the key assumptions that underlie the operating expenditure forecast;

(6) a certification of the reasonableness of the key assumptions by the directors of the *Transmission Network Service Provider*;

(7) operating expenditure for each of the first three *regulatory year*s of the current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory year*s of that *regulatory control period*, categorised in the same way as for the operating expenditure forecast;

(8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure; and

(9) any non-network alternatives considered by the *Transmission Network Service Provider*.

S6A.1.3 Additional information and matters

A *Revenue Proposal* must contain at least the following additional information and matters:

(1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;

(2) the values that the *Transmission Network Service Provider* proposes are to be attributed to the *performance incentive scheme parameters* for the purposes of the application to the provider of the *service target performance incentive scheme* that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any requirements relating to them set out in that scheme;

(3) the values that the provider proposes are to be attributed to the *efficiency benefit sharing scheme parameters* for the purposes of the application to the provider of the *efficiency benefit sharing scheme* that applies in respect of the relevant *regulatory control period*, and an explanation of how the values proposed to be attributed to those parameters comply with any relevant requirements set out in that scheme;

(4) the provider's calculation of:

(i) the estimated *total revenue cap* for it for the relevant *regulatory control period*; and

(ii) the *maximum allowed revenue* for it for each *regulatory year* of the relevant *regulatory control period*,

using the *post-tax revenue model* referred to in rule 6A.5 of the *Rules*, together with:

(iii) details of all amounts, values and other inputs used by the provider for that purpose;

(iv) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A of the *Rules*; and

(v) an explanation of the calculation of the amounts referred to in subparagraphs (i) and (ii) and of the amounts, values and inputs referred to in subparagraph (iii);

(5) the provider's calculation of the regulatory asset base for the relevant *transmission system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6A.6.1 of the *Rules*, together with:

(i) details of all amounts, values and other inputs used by the provider for that purpose;

(ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of Chapter 6A of the *Rules*; and

(iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);

(6) the commencement and length of the period nominated by the *Transmission Network Service Provider* for the purposes of clause 6A.6.2(c)(2) of the *Rules*;

(7) the depreciation schedules nominated by the *Transmission Network Service Provider* for the purposes of clause 6A.6.3 of the *Rules*, which categorise the relevant assets for these purposes by reference to well accepted categories such as:

(i) asset class (eg *transmission lines* and *substation*s); or

(ii) category driver (eg *regulatory obligations or requirements*, replacement, *reliability*, net market benefit, and business support),

and also by location, together with:

(iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules;

(iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6A.6.3(b) of the *Rules*; and

(v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);

(8) the X factors nominated by the provider for each *regulatory year* of the relevant *regulatory control period* for the purposes of clause 6A.6.8(a) of the *Rules*, together with a demonstration that those X factors comply with the requirements set out in clause 6A.6.8(b) of the *Rules*;

(9) the commencement and length of the *regulatory control period* proposed by the *Transmission Network Service Provider*; and

(10) if the *Transmission Network Service Provider* is seeking a determination by the *AER* that a *proposed contingent project* is a *contingent project* for the purposes of the relevant *revenue determination*:

(i) a description of the *proposed contingent project*, including reasons why the provider considers the project should be accepted as a *contingent project* for the *regulatory control period*;

(ii) a forecast of the capital expenditure which the provider considers is reasonably required for the purpose of undertaking the *proposed contingent project*;

(iii) the methodology used for developing that forecast and the key assumptions that underlie it;

(iv) information that demonstrates that the undertaking of the *proposed contingent project* is reasonably required in order to achieve one or more of the *capital expenditure objectives*;

(v) information that demonstrates that the *proposed contingent capital expenditure* for the *proposed contingent project* complies with the requirements set out in clause 6A.8.1(b)(2) of the *Rules*; and

(vi) the *trigger events* which are proposed in relation to the *proposed contingent project* and an explanation of how each of those conditions or events addresses the matters referred to in clause 6A.8.1(c) of the *Rules.*

Schedule 6A.2 - Regulatory Asset Base

S6A.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) **Application of this clause**

This clause S6A.2.1:

(1) applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and

(2) also applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of a *regulatory control period* where the *transmission system* was not immediately before that time the subject of a *revenue determination*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6A.6.1 of the *Rules* must provide for those values to be established in accordance with the requirements of clauses S6A.2.1, S6A.2.2 and S6A.2.3.

(c) **Transmission systems of specific providers**

(1) In the case of a *transmission system* owned, controlled or operated by one of the following *Transmission Network Service Provider*s as at 16 February 2006, the value of the regulatory asset base for that *transmission system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *transmission system*, as set out in the table below, in accordance with this schedule:

Transmission Network Service Provider	**Regulatory Asset Base ($m)**
EnergyAustralia	635.6 (as at 1 July 2004)
TransGrid	3,012.76 (as at 1 July 2004)
Powerlink	As per transitional revenue determination in accordance with clause 11.6.12
ElectraNet	823.75 (as at 1 January 2003)
Transend	603.6 (as at 31 December 2003)
SP AusNet	1,835.60 (as at 1 January 2003)
Murraylink Transmission Company	102.96 (as at 1 October 2003)
Directlink	116.68 (as at 1 July 2005)

(2) The values in the table above are to be adjusted for the difference between:

(i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(d) **Other transmission systems**

(1) This paragraph (d) applies to a *transmission system* not referred to in paragraphs (c) or (e), when *prescribed transmission services* that are provided by means of, or in connection with, that system are to be regulated under a *revenue determination.*

(2) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* for the relevant *Transmission Network Service Provider* is the prudent and efficient value of the assets that are used by the provider to provide those *prescribed transmission services* (but only to the extent that they are used to provide such services), as determined by the *AER*. In determining this value, the *AER* must have regard to the matters referred to in clause S6A.2.2.

(3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(e) **Former Market Network Services**

(1) This paragraph (e) applies to a *transmission system* where any services provided by means of, or in connection with, that *transmission system* are determined to be *prescribed transmission services* under clause 2.5.2(c).

(2) The value of the regulatory asset base for that *transmission system*, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those services are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* as the lesser of:

(i) the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those prescribed services (but only to the extent they are used to provide such services), such value being determined by the *AER* having regard to the matters referred to in clause S6A.2.2; and

(ii) the sum of:

(A) the net present value of the revenue that it is expected would be earned by the provider from the provision of those services, over the remaining life of the assets that are used by the provider to provide those services, if those services had not been determined to be *prescribed transmission services*; and

(B) to the extent that such market benefit is not included in the expected revenue referred to in clause S6A.2.1(e)(2)(ii)(A), the net present value of the market benefit to *Registered Participants* of the services being determined to be *prescribed transmission services* compared to being continued to be treated as services that are not *prescribed transmission services*,

reduced by the net present value of the total operating expenditure over the remaining life of the *transmission system* which the *AER* considers to be reasonably required in order to achieve the *operating expenditure objectives*.

For the purposes of clause S6A.2.1(e)(2)(ii)(B), the net present value of the market benefit is the present value of the market benefit less the present value of costs, as those terms are defined for the purposes of the *regulatory test* or *regulatory investment test for transmission* (as the case may be).

(3) The value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of any subsequent *regulatory control period* must be determined by rolling forward the value of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the first *regulatory control period* in accordance with this schedule.

(f) **Method of adjustment of value of regulatory asset base**

Except as otherwise provided in paragraph (c), (d) or (e), the value of the regulatory asset base for a *transmission system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *transmission system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the '**previous control period**') as follows:

(1) The previous value of the regulatory asset base must be increased by the amount of all capital expenditure incurred during the previous control period, including any capital expenditure determined for that period under clause 6A.8.2(e)(1)(i) in relation to *contingent project*s where the *revenue determination* has been amended by the *AER* in accordance with clause 6A.8.2(h) (regardless of whether such capital expenditure is above or below the forecast capital expenditure for the period that is adopted for the purposes of the *transmission determination* (if any) for that period).

(2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available, including any capital expenditure in relation to *contingent project*s where the *total revenue cap* has been amended by the *AER* in accordance with clause 6A.8.2(h).

(3) The previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *prescribed transmission services* in accordance with the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*.

(5) The previous value of the regulatory asset base must be reduced by the amount of actual depreciation of the regulatory asset base during the previous control period, calculated in accordance with the rates and methodologies allowed in the *transmission determination* (if any) for that period.

(6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous control period.

(7) The previous value of the regulatory asset base must be reduced by the value of any asset where the *AER* determines that the value of that asset should be removed in accordance with clause S6A.2.3.

(8) Without prejudice to the application of any other provision of this paragraph (f), the previous value of the regulatory asset base may be increased by the inclusion of:

(i) past capital expenditure that has not been included in that value because that capital expenditure was incurred in connection with the provision of services that are not *prescribed transmission services*, and in these circumstances, such capital expenditure must only be included to the extent the asset in respect of which that capital expenditure was incurred is subsequently used for the provision of *prescribed transmission services*; and

(ii) past capital expenditure that has not been included in that value, but only to the extent that such past capital expenditure:

(A) relates to an asset that is used for the provision of *prescribed transmission services*;

(B) is considered by the *AER* to be reasonably required in order to achieve one or more of the *capital expenditure objectives*;

(C) is properly allocated to *prescribed transmission services* in accordance with the principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*; and

(D) has not otherwise been recovered.

S6A.2.2 Prudency and efficiency of capital expenditure

In determining the prudency or efficiency of capital expenditure under clause S6A.2.1(d)(2) or S6A.2.1(e)(2), the *AER* must have regard to:

(1) the need to provide a reasonable opportunity for the relevant *Transmission Network Service Provider* to recover the efficient costs of complying with all applicable *regulatory obligations or requirements* associated with the provision of *prescribed transmission services*;

(2) the need to provide effective incentives to the provider to promote economic efficiency in the provision of *prescribed transmission services*;

(3) whether the relevant project in respect of which capital expenditure was made was evaluated against, and satisfied, the *regulatory test* or *regulatory investment test for transmission* (as the case may be);

(4) whether the provider undertook the capital expenditure in a manner consistent with good business practice and so as to practicably achieve the lowest sustainable cost of delivering the *prescribed transmission services* to be provided as a consequence of that capital expenditure;

(5) the desirability of minimising investment uncertainty for the provider; and

(6) the need to provide incentives to the provider to avoid undertaking inefficient capital expenditure.

In determining the prudency or efficiency of capital expenditure the *AER* must only take into account information and analysis that the provider could reasonably be expected to have considered or undertaken at the time that it undertook the relevant capital expenditure.

S6A.2.3 Removal of assets from regulatory asset base

(a) For the purposes of rolling forward the regulatory asset base for a *transmission system* as described in clause 6A.6.1 of the *Rules* and this schedule, the *AER* may only determine to remove, from the regulatory asset base for a *transmission system*, the value of an asset (or group of assets):

(1) to the extent that:

(i) the asset (or group of assets) is dedicated to one *Transmission Network User* (not being a *Distribution Network Service Provider*) or a small group of *Transmission Network Users*; and

(ii) the value of the asset (or group of assets), as included in the value of that regulatory asset base as at the beginning of the first *regulatory year* of the current *regulatory control period*, exceeds the *indexed amount*, as at the time of the *AER*'s determination, of $10 million;

(2) if the *AER* determines that the asset (or group of assets) is no longer contributing to the provision of *prescribed transmission services*; and

(3) if the *AER* determines that the relevant *Transmission Network Service Provider* has not adequately sought to manage the risk of that asset (or that group of assets) no longer contributing to the provision of *prescribed transmission services* by:

(i) seeking to negotiate the payment of a lower price by the relevant *Transmission Network Users* for those *prescribed transmission services* in accordance with the *Rules*; or

(ii) in the case of assets committed to be constructed on or after 16 February 2006, seeking to enter into arrangements which provide for a reasonable allocation of the risks of the value of that asset (or that group of assets) no longer contributing to the provision of *prescribed transmission services*.

For the purposes of clause S6A.2.3(a)(3)(ii), an asset is, and is only, to be taken to be committed to be constructed if it satisfies the criteria which a project needs to satisfy to be a "committed project" for the purposes of the *regulatory test* or *regulatory investment test for transmission* (as the case may be).

(b) The *AER* may determine a separate amount which is to be included in the *annual building block revenue requirement* for a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* so as to compensate the provider for the risk of the value of assets being removed from the regulatory asset base for the relevant *transmission system*, but only if it is satisfied that:

(1) the risk is not otherwise addressed through another provision of the *Rules*;

(2) the provider has taken all the steps that a prudent *Transmission Network Service Provider* would take to manage the risk; and

(3) the *total revenue cap* for the provider for that *regulatory control period* does not adequately reflect risks that cannot be reasonably managed.

S6A.2.4 Roll forward of regulatory asset base within the same regulatory control period

(a) **Application of this clause**

This clause S6A.2.4 applies to the establishment of the value of the regulatory asset base for a *transmission system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) **Roll forward model to comply with this clause**

The *roll forward model* referred to in clause 6A.6.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause S6A.2.4.

(c) **Method of adjustment of value of regulatory asset base**

The value of the regulatory asset base for a *transmission system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *transmission system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

(1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6A.6.7(c) or clauses 6A.13.2(b)(4) and (5) (as the case may be).

(2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *annual building block revenue requirement* for the previous year.

(3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.

(4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) **Allowance for working capital**

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *transmission system* which is rolled forward in accordance with this clause S6A.2.4.

Schedule 6A.3 –CRNP methodology and modified CRNP methodology

S6A.3.1 Meaning of optimised replacement cost

For the purposes of this schedule 6A.3, references to "optimised replacement cost" include an accepted equivalent to optimised replacement cost that is referable to values contained in the accounts of the *Transmission Network Service Provider*.

S6A.3.2 CRNP methodology

CRNP Methodology (or *cost reflective network pricing*) is an allocation process that involves the following steps:

(1) Attributing network 'costs' to *transmission system* assets: the locational component of the *ASRR* allocated to *prescribed TUOS services* is allocated to each asset used to provide *prescribed TUOS services* based on the ratio of the optimised replacement cost of that asset, to the optimised replacement cost of all *transmission system* assets used to provide *prescribed use of system services*. The allocation to each *transmission system* asset is the '**locational network asset cost**'.

(2) Determining the baseline allocation of *generation* to *loads* using a 'fault contribution matrix'.

(3) Determining the allocation of dispatched *generation* to *loads* over a range of actual operating conditions from the previous *financial year*. The range of operating scenarios is chosen so as to include the conditions that result in most stress on the *transmission networ*k and for which *network* investment may be contemplated. For each operating scenario selected:

(i) a constrained allocation of *generation* to *loads* matrix must be developed, in which *generation* is allocated to serving *loads* on the basis of the fault contribution matrix;

(ii) load flow analysis techniques are used to solve for *network* flows and to calculate the sensitivity of flows on each *network element* resulting from incremental changes in each *load*;

(iii) the sensitivities are weighted by *load* to derive a 'flow component' magnitude in each *network* element due to each *load* for that hour;

(iv) the relative utilisation of each *network* element by each *load* is calculated from the 'flow component' magnitudes, using only the flow components in the direction of the prevailing line flow.

(4) When all the selected operating scenarios have been assessed, allocating the individual locational *networ*k asset costs to *loads* on a pro rata basis using the maximum 'flow component' that each *load* has imposed on each *networ*k asset across the range of operating conditions considered.

(5) Summing the individual locational *network* asset costs allocated to each *load* to give the total amounts allocated to that *load*.

S6A.3.3 Modified CRNP methodology

Modified CRNP methodology is an allocation process that involves replacing step 1 of the CRNP methodology referred to in clause S6A.3.2(1) with the following 3 steps:

(1) Allocating the *ASRR* allocated to *prescribed use of system services* to each *transmission system* asset used to provide *prescribed TUOS services* based on the ratio of the optimised replacement cost of the that asset to the optimised replacement cost of all *transmission system* assets used to provide *prescribed TUOS services*. The amount so allocated to each asset is the asset's gross network asset cost.

(2) Adjusting individual gross *network* asset costs: the individual gross *network* asset costs determined in subparagraph (1) must each be multiplied by a factor (between 0 and 1) that depends on the utilisation of each asset. The resulting amount for each asset is the locational network asset cost while the remainder is the non-locational network asset cost.

(3) Determining the non-locational component: the sum of the non-locational *network* asset cost represents the pre-adjusted non-locational component of the *ASRR* for *prescribed TUOS services*.

Schedule 6A.4—Application of this Chapter to AEMO and declared transmission system operators

S6A.4.1 Application of this Chapter to AEMO etc

(a) For the purpose of applying this Chapter, *AEMO* will be regarded as a *Transmission Network Service Provider* providing *shared transmission services.*

(b) However, in the application of this Chapter to *transmission services* provided by means of, or in connection with, the *declared transmission*

system of an *adoptive jurisdiction*, a reference to a *Transmission Network Service Provider* is, in relation to the provision of *entry services*, *exit services* or *shared network capability services* to be read as a reference to a *declared transmission system operator*.

S6A.4.2 Exclusions, qualifications and modifications

(a) This Chapter will be read subject to the following exclusions, qualifications and modifications.

(b) **Part A (Introduction)**

Clause 6A.1.4(b) is excluded.

(c) **Part B (Transmission Determinations Generally)**

This Part applies subject to the following exclusions, qualifications and modifications:

Clause 6A.2.2 (Components of transmission determinations):

(1) A *transmission determination* for *AEMO* will not include a *revenue determination.*

(2) However, *AEMO* must have a revenue methodology (which will not be subject to the *AER's* approval) setting out the method for calculating *AEMO's maximum allowed revenue* for the provision of *prescribed transmission services* for each *regulatory year*.

(3) In formulating its revenue methodology, or an amendment to its revenue methodology, *AEMO* must consult with the public.

(4) *AEMO's maximum allowed revenue* consists of:

(i) so much of the *aggregate annual revenue requirement* of each *declared transmission system operator* for *AEMO's regulatory year* as relates to the provision to *AEMO* of *shared network capability services*; and

(ii) the other costs forecast to be incurred by *AEMO* in the same *regulatory year* for the provision of *prescribed shared transmission services*.

Note:

The costs under subparagraph (ii) might include the cost of *electricity network services* provided by a *declared transmission system operator* where those services are, from the standpoint of the operator, not *prescribed transmission services*.

(5) The revenue methodology must include a description of:

(i) the categories of costs to be recovered; and

(ii) the method (which must be consistent with the *Cost Allocation Principles*) for allocating costs to *prescribed transmission services* and *negotiated transmission services*; and

(iii) how under and over recovery of revenue in a particular *regulatory year* is to be treated.

(6) The revenue methodology must be consistent with section 52 of the *National Electricity Law* and the provisions of Chapter 2 of these *Rules* applicable to *AEMO*.

(7) *AEMO* must comply with its revenue methodology.

(8) Before the commencement of the *regulatory year* to which *AEMO's* revenue methodology applies, *AEMO* must *publish*:

(i) the revenue methodology; and

(ii) a report on how it has applied its revenue methodology for the purpose of determining prices for the ensuing *regulatory year.*

(9) However, for the *regulatory year* commencing on 1 July 2009, *AEMO* may, instead of formulating and publishing its own revenue methodology, adopt as its revenue methodology relevant provisions of the *transmission determination* that would have applied to VENCorp for that *regulatory year* if the legislative and regulatory changes that took effect at the commencement of that *regulatory year* had not been made.

(d) **Part C (Regulation of Revenue – Prescribed Transmission Services)**

This Part is not applicable to *AEMO*.

This Part applies to a *declared transmission system operator* with the following modification of clause 6A.7.1:

If a *declared transmission system operator* is directed by *AEMO*, or is required by or agrees with a *Connection Applicant*, to construct an *augmentation*, clause 6A.7.1 applies as if:

(1) the direction, requirement or agreement were an event in respect of which the *declared transmission system operator* were unconditionally authorised under clause 6A.7.1(a) to apply to the *AER* for revocation and substitution of a *revenue determination*; and

(2) clause 6A.7.1(a)(1) to (7) were inapplicable to an application founded on such an event; and

(3) the following were added after clause 6A.7.1(d):

(da) If a *declared transmission system operator* is directed by *AEMO*, or is required by or agrees with a *Connection Applicant*, to construct an *augmentation*, and the operator applies to the *AER* for revocation of a *revenue determination* on that ground, the *AER* must revoke the *revenue determination*.

(e) **Part D (Negotiated Transmission Services)**

Part D applies subject to the following qualification:

Clause 6A.9.1 applies to *AEMO* as if the reference in paragraph (1) to "principles and policies set out in the *Cost Allocation Methodology* for the relevant *Transmission Network Service Provider*" were a reference to principles and policies set out in *AEMO*'s revenue methodology.

(f) **Part E (Revenue determinations, negotiating frameworks and pricing methodologies)**

Part E applies subject to the following exclusions, qualifications and modifications:

1. Clause 6A.10.1 (Submission of proposal, framework, pricing methodology and information)

Clause 6A.10.1 applies to *AEMO* as if for paragraphs (a), (b) and (c) the following were substituted:

(a) *AEMO* must, as and when required by the *AER*, submit to the *AER*:

(1) a proposed *pricing methodology* relating to *shared transmission services* that are *prescribed TUOS services* or *prescribed common transmission services* (*prescribed shared transmission services*); and

(2) a proposed *negotiating framework* relating to *shared transmission services* that are *negotiated transmission services*.

(b) *AEMO's pricing methodology*:

(1) must be designed to recover no more than *AEMO*'s *maximum allowed revenue* for the provision of *prescribed shared transmission services*; and

(2) must set out the principles on which prices for *prescribed shared transmission services* are to be determined.

(c) Exact equivalence is not required between the costs of providing a service and the revenue derived from providing the service in a

particular *regulatory year* if there are reasonable grounds to believe that costs will over time approximate revenue.

(ca) The proposed *negotiating framework* must comply with the requirements of, and must contain or be accompanied by the information required by, the *submission guidelines* so far as they are relevant.

2. Clause 6A.10.2 (Submission guidelines)

The *submission guidelines* apply to *AEMO* only insofar as they are relevant to *AEMO's* proposed *negotiating framework*.

3. Clause 6A.11.1 (Preliminary examination and determination of non-compliance with relevant requirements)

Clause 6A.11.1 applies to *AEMO* only insofar as relevant to a *negotiating framework* or *pricing methodology*.

4. Clause 6A.11.2 (Resubmission of proposal, framework, pricing methodology or information)

Clause 6A.11.2 applies to *AEMO* only insofar as relevant to a *negotiating framework* or *pricing methodology.*

5. Clause 6A.11.3 (Resubmission of proposal, framework, pricing methodology or information)

Clause 6A.11.3 applies to *AEMO* only insofar as relevant to a *negotiating framework* or *pricing methodology.*

6. Rule 6A.12 (Draft decision and further consultation)

This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *negotiating framework* or a *pricing methodology*.

7. Rule 6A.13 (Final decision)

This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *negotiating framework* or a *pricing methodology*.

8. Rule 6A.14 (Requirements relating to draft and final decisions)

(a) This *Rule* applies to *AEMO* only insofar as relevant to a decision on a *negotiating framework* or a *pricing methodology*.

(b) Clause 6A.14.3(e) (which requires the *AER* to approve a *regulatory control period* of 5 *regulatory years*) is inapplicable to *AEMO*.

Note

The *Rule* is thus largely inapplicable. Of clause 6A.14.1 only paragraphs (6), (7) and (8) are applicable. Clause 6A.14.2 requires the *AER* to give reasons setting out the basis and rationale of its decision. This requirement is relevant to a decision on a *pricing methodology* or *negotiating framework* but the matters of detail mentioned in paragraphs (1) to (4) would, as a general rule, be irrelevant to such a decision. Of clause 6A.14.3 only paragraphs (f) to (i) would be relevant.

9. Rule 6A.15 (Revocation of revenue determination or amendment of pricing methodology for wrong information or error)

This *Rule* applies to *AEMO* only insofar as relevant to the amendment of a *pricing methodology.*

10. Rule 6A.16 (Miscellaneous)

This *Rule* applies as if it included the following additional paragraphs:

(g) *AEMO* must, on or before 15 May in each year, *publish* its prices for *prescribed shared transmission services* for its next *regulatory year*.

(h) A *declared transmission system operator* must notify *AEMO* of its revenue requirement for the provision of *shared network capability services* for *AEMO's* next *regulatory year* in sufficient time to enable *AEMO* to calculate prices in accordance with the approved *pricing methodology* and meet its obligations under paragraph (g).

(g) **Part F (Information Disclosure)**

This Part is not applicable to *AEMO*.

(h) **Part G (Cost Allocation)**

AEMO's revenue methodology must be consistent with the *Cost Allocation Principles* set out in this Part: see clause S6A.4.2(c)(5). This Part applies to *AEMO* only insofar as it is relevant to that requirement.

(i) **Part H (Transmission Consultation Procedures)**

No exclusions, qualifications or modifications are prescribed.

(j) **Part I (Ring-Fencing Arrangements for Transmission Network Service Providers)**

This Part is not applicable to *AEMO*.

(k) **Part J (Prescribed Transmission Services – Regulation of Pricing)**

Part J applies subject to the following exclusions, qualifications and modifications:

1. Rule 6A.23 (Pricing Principles for Prescribed Transmission Services)

Clause 6A.23.3 applies as if it included the following additional paragraphs:

(g) In relation to the *declared transmission system* of an a*doptive jurisdiction*:

(1) *AEMO* is responsible for allocating the *ASRR* for *prescribed TUOS services* and *prescribed common transmission services*; and

(2) the relevant *declared transmission system operator* is responsible for allocating the *ASRR* for *prescribed entry services* and *prescribed exit services*.

(h) A *declared transmission system operator* must:

(1) allocate costs between *shared network capability services a*nd *prescribed connection services*; and

(2) notify *AEMO* of its allocation (and the basis on which it was made) in sufficient time to calculate prices for *AEMO's* next *regulatory year* in accordance with its *pricing methodology*; and

(3) provide *AEMO* (as and when requested by *AEMO*) with the information *AEMO* reasonably requires to allocate *ASRR* for *prescribed TUOS services* and *prescribed common transmission services*.

Clause 6A.23.4 applies as if it included the following additional paragraph:

(k) A *declared transmission system operator* is not required to develop separate prices for recovery of the *ASRR* referable to *shared network capability services*.

2. Rule 6A.24 (Pricing Methodology)

Clause 6A.24.1 applies as if the following paragraphs were substituted for paragraphs (e) and (f):

(e) Subject to express provisions of these *Rules* to the contrary, a *pricing methodology*:

(1) applies for the duration of the relevant *regulatory control period*; and

(2) may not be amended during the *regulatory control period*.

(f) However, the *AER* may, on an application made by *AEMO* during the *regulatory year* commencing on 1 July 2009, amend *AEMO's pricing methodology* as it applies to the setting of prices for the *regulatory year* commencing on 1 July 2010 and later *regulatory years*.

3. Clause 6A.26.1 (Agreements for prudent discounts for prescribed

transmission services)

Clause 6A.26.1 applies as if:

(1) the power under paragraph (b) to agree to charge lower prices for *prescribed TUOS services* and *prescribed common transmission services* were vested in *AEMO* to the exclusion of the relevant *declared transmission system operator*; and

(2) additional provisions to the following effect were included:

(i) *AEMO* must obtain the written consent of the relevant *declared transmission system operator* before exercising that power;

(ii) the relevant *declared transmission system operator* and *AEMO* must negotiate in good faith whenever either of them asks the other to consider a proposal for the exercise of that power in a particular manner.

4. Clause 6A.26.2 (Application to *AER* for approval of proposed prudent discount amounts)

Clause 6A.26.2 (k) is not applicable to *AEMO*.

5. Clause 6A.29.1 (Multiple Transmission Network Service Providers within a region)

Clause 6A.29.1 applies as if it included the following additional paragraph:

(g) *AEMO* is (without appointment under clause 6A.29.1(a)) the *Co-ordinating Network Service Provider* for a *region* that includes the whole or the major part of the *declared shared network*.

(l) **Part K (Commercial arbitration for disputes about terms and conditions of access for prescribed and negotiated transmission services)**

This Part does not apply to a dispute that can be resolved by the *AER* under section 50H of the *National Electricity Law*.

(m) **Schedule S6A.1 (Contents of Revenue Proposals)**

This Schedule is not applicable to *AEMO*.

(n) **Schedule S6A.2 (Regulatory Asset Base)**

This Schedule is not applicable to *AEMO*.

Clause S6A.2.3(a)(3)(i) is not applicable to a *declared transmission system operator*.

(o) **Schedule S6A.3 (CRNP methodology and modified CRNP methodology)**

This Schedule applies without exclusion, qualification or modification.

CHAPTER 7

7. Metering

7.1 Introduction to the Metering Chapter

7.1.1 Purpose

(a) The purpose of this Chapter is to set out the rights and obligations of *Registered Participants* and the rights, obligations and qualifications of *Metering Providers* associated with the measurement of electrical *energy*, and the provision of *metering data* and *B2B Data* and the performance of *B2B Communications.*

(b) This Chapter sets out provisions relating to:

(1) *revenue metering installations* and *check metering installations* used for the measurement of *active energy* and, where appropriate, *reactive energy*;

(2) collection and provision of *metering data* and *B2B Data*;

(3) provision, installation and maintenance of *metering installations* and the provision and servicing of *data collection systems*;

(4) accuracy of *metering installations*;

(5) inspection, testing and audit requirements;

(6) security of, and rights of access to, *metering data* and *B2B Data*;

(7) competencies and standards of performance; and

(8) the *metering database,* including *metering register* requirements.

(c) Nothing in this Chapter precludes the application of evolving technologies and processes as they become available in accordance with the *Rules*.

7.1.2 Obligations of Market Participants to establish metering installations

(a) Before participating in the *market* in respect of a *connection point*, a *Market Participant* must ensure that:

(1) the *connection point* has a *metering installation* and that the *metering installation* is registered with *AEMO*;

(2) either:

(i) it has become the *responsible person* under clause 7.2.2 and has advised the *Local Network Service Provider*; or

(ii) it has sought an offer and, if accepted, entered into an agreement under clause 7.2.3; and

(3) prior to registration, a *NMI* has been obtained by the *responsible person* for that *metering installation*.

(b) *AEMO* may refuse to permit a *Market Participant* to participate in the *market* in respect of any *connection point* in relation to which that *Market Participant* is not in compliance with its obligations under paragraph (a).

7.2 Responsibility for Metering Installation

7.2.1 Responsible person

The *responsible person* is the person responsible for the provision, installation and maintenance of a *metering installation* in accordance with:

(1) this Chapter 7; and

(2) the *metrology procedure*.

7.2.2 Responsibility of the Market Participant

(a) A *Market Participant* may elect to be the *responsible person* for a *metering installation* that is a type 1, 2, 3 or 4 *metering installation*.

(b) A *Market Participant* is the *responsible person* for a type 1, 2, 3 or 4 *metering installation* if:

(1) the *Market Participant* elects not to request an offer from, or does not accept the offer of, the *Local Network Service Provider* for the provision of a *metering installation* under clause 7.2.3; or

(2) an agreement under clause 7.2.3 is terminated due to a breach by the *Market Participant*.

7.2.3 Responsibility of the Local Network Service Provider

(a) The *Local Network Service Provider* is the *responsible person* for:

(1) a type 1, 2, 3 or 4 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* where the *Market Participant* has accepted the *Local Network Service Provider's* offer in accordance with paragraphs (b) and (c); and

(2) a type 5, 6 or 7 *metering installation* connected to, or proposed to be connected to, the *Local Network Service Provider's network* in accordance with paragraphs (d) to (i).

Types 1 - 4 metering installations

(b) A *Market Participant* may request in writing an offer from the *Local Network Service Provider* to act as the *responsible person* where a type 1, 2, 3 or 4 *metering installation* is, or is to be, installed.

(c) If the *Local Network Service Provider* receives a request under paragraph (b), the *Local Network Service Provider* must:

(1) offer to act as the *responsible person* in respect of that *metering installation*; and

(2) provide the *Market Participant* with the terms and conditions on which the offer is made,

no later than 15 *business days* after the *Local Network Service Provider* receives the written request from the *Market Participant*.

Types 5 -7 metering installations

(d) The *Local Network Service Provider* may provide a *Market Participant* with a standard set of terms and conditions on which it will agree to act as the *responsible person* for a type 5, 6 or 7 *metering installation*.

(e) Where the *Local Network Service Provider* has not provided the *Market Participant* with the standard set of terms and conditions referred to in paragraph (d), the *Market Participant* must request an offer from the *Local Network Service Provider* to act as the *responsible person* where a type 5, 6 or 7 *metering installation* is, or is to be, installed.

(f) The *Local Network Service Provider* must, within 15 *business days* of receipt of the request under paragraph (e), make an offer to a *Market Participant* setting out the terms and conditions on which it will agree to act as the *responsible person*.

(g) The terms and conditions of an offer made under paragraphs (d) or (f) must:

(1) be fair and reasonable; and

(2) not have the effect of unreasonably discriminating between *Market Participants*, or between the customers of a *Market Participant*.

(h) In relation to an offer made under paragraphs (d) or (f), a *Market Participant*:

(1) must accept the offer; or

(2) may dispute the offer in accordance with rule 8.2.

(i) If a *Market Participant* accepts the offer in accordance with paragraph (h), the *Local Network Service Provider*:

(1) becomes the *responsible person*; and

(2) must provide *AEMO* with the *NMI* for the *metering installation* within 10 *business days* of entry into a *connection agreement* under clause 5.3.7 with that *Market Participant*.

7.2.4 Joint metering installations

(a) Where more than one *Market Participant* wishes to use a *metering installation* at a particular *connection point* for the purpose of satisfying its obligations, then each of them may separately enter into the agreements referred to in clause 7.2.3 or some or all of them may jointly enter into those agreements for the use of a shared *metering installation*.

(b) Where more than one *Market Participant* uses a *metering installation* which is provided, installed and maintained by a person other than the *Local Network Service Provider,* they must agree and notify *AEMO* as to which of them is the *responsible person* for that *metering installation.*

(c) In the absence of such agreement, *AEMO* may nominate one of the *Market Participants* to be the *responsible person* for that *metering installation.*

7.2.5 Role of the responsible person

Engagement of a Metering Provider

(a) A *responsible person* must for each *metering installation* for which it is responsible:

(1) engage a *Metering Provider* for the provision, installation and maintenance of that installation unless the *responsible person* is the *Metering Provider*; or

(2) subject to the *metrology procedure*, allow another person to engage a *Metering Provider* to install that installation.

(b) The *responsible person* must:

(1) enter into an agreement with a *Metering Provider*:

(i) for the provision, installation and maintenance of the *metering installation* by the *Metering Provider*, where the *responsible*

person has engaged the *Metering Provider* under paragraph (a)(1); or

(ii) for the maintenance of the *metering installation*, where another person has engaged the *Metering Provider* under paragraph (a)(2); and

(2) provide *AEMO* with the relevant details of the *metering installation* as specified in schedule 7.5 within 10 *business days* of obtaining a *NMI* in accordance with 7.3.1(e).

(c) The *responsible person* may elect to terminate an agreement entered into under paragraph (b)(1)(i) after the *metering installation* is installed and if such an agreement is terminated, the *responsible person* must enter into a new agreement with another *Metering Provider* for the maintenance of the *metering installation*.

Metering installations

(d) The *responsible person* must, for each of its *metering installations*:

(1) ensure that the installation is provided, installed and maintained in accordance with the *metrology procedure*;

(2) ensure that the components, accuracy and testing of the installation complies with the requirements of the *Rules* and the *metrology procedure*;

(3) provide and maintain the security control of the installation in accordance with clause 7.8.2;

(4) ensure that a *communications link* is installed and maintained to the *telecommunications network* and includes, where required for the *connection* to that *telecommunications network*, a modem and *isolation* equipment approved under telecommunications regulations;

(5) provide access to a *telecommunications network* to facilitate the requirement of rules 7.7 and 7.12(aa);

(6) provide to *AEMO* (when requested), the information specified in schedule 7.5 for new or modified installations;

(7) not replace a device that is capable of producing *interval energy data* and is already installed in a *metering installation*, with a device that only produces *accumulated energy data* unless the *metrology procedure* permits the replacement to take place;

(8) ensure for any type 5 *metering installation* where the annual flow of electricity through the *connection point* is greater than the *type 5*

accumulation boundary, that the *metering data* is extracted or emanates from the *data logger* as *interval energy data*; and

(9) allow the alteration of the installation for which that person is responsible with another installation in accordance with clause 7.3.4.

(e) The *Market Settlements and Transfer Solution Procedures* may specify that an incoming *responsible person* is responsible for the *metering installation*:

(1) on the day that a *market load* transfers from one *financially responsible Market Participant* to another *financially responsible Market Participant* for the period within that day; or

(2) on any other day.

(f) *AEMO* must establish guidelines, in accordance with the *Rules consultation procedures* in relation to the role of the *responsible person* consistent with this Chapter 7.

7.2.6 [Deleted]

7.2.7 Registration of metering installations

(a) *AEMO* must establish and *publish* a registration process to facilitate the application of this Chapter 7 to *Market Participants* and *Network Service Providers* in respect of:

(1) new *metering installations;*

(2) modifications to existing *metering installations;* and

(3) decommissioning of *metering installations,*

including the provision of information on matters such as application process, timing, relevant parties, fees and *metering installation* details.

7.2.8 Market Settlement and Transfer Solution Procedures

(a) *AEMO,* in consultation with *Registered Participants* in accordance with the *Rules consultation procedures,* must develop and *publish Market Settlement and Transfer Solution Procedures*.

(b) *AEMO* may from time to time amend the *Market Settlement and Transfer Solution Procedures* in consultation with *Registered Participants* in accordance with the *Rules consultation procedures*. *AEMO* must *publish* any such amendment to the *Market Settlement and Transfer Solution Procedures.*

(c) The *Market Settlement and Transfer Solution Procedures* may include roles and responsibilities for *Metering Providers*.

(d) All *Registered Participants* and *Metering Providers* must comply with the *Market Settlement and Transfer Solution Procedures*.

(e) If a *Registered Participant* or *Metering Provider* breaches the requirements of the *Market Settlement and Transfer Solution Procedures*, *AEMO* may send to that *Registered Participant* or *Metering Provider* a notice in writing setting out the nature of the breach.

(f) If the *Registered Participant* or *Metering Provider* remains in breach for more than 5 *business days* after receipt of the notice from *AEMO, AEMO* must advise:

(1) the authority responsible for administering *jurisdictional electricity legislation* in the *participating jurisdiction* in which the *connection point* to which the breach relates is located; and

(2) the *AER*.

7.2A.1 B2B e-Hub

AEMO must provide and operate a *B2B e-Hub*. As required by *B2B Procedures* and subject to clause 7.2A.4(k), *Local Retailers, Market Customers* and *Distribution Network Service Providers* must use the *B2B e-Hub* for *B2B Communications*.

7.2A.2 Information Exchange Committee

(a) *AEMO* must establish the *Information Exchange Committee* in accordance with the *Information Exchange Committee Election Procedures.*

(b) The *Information Exchange Committee* must only be constituted by:

(1) three *Distribution Network Service Provider Members*;
(2) three *Local Retailer/Market Customer Members*; and
(3) two *Independent Members.*

Local Retailers and *Market Customers* together and *Distribution Network Service Providers* must, in relation to categories of *Members* in relation to which they are entitled to vote under the *Information Exchange Committee Election Procedures*, use their reasonable endeavours to ensure that the *Information Exchange Committee* is established in accordance with the *Information Exchange Committee Election Procedures*. Each *Member* must serve on the *Information Exchange Committee* for the term specified in the *Information Exchange Committee Election Procedures* and must only be removed or replaced in accordance with the *Information Exchange Committee Election Procedures*.

(c) *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* must ensure that the *Information Exchange Committee Election Procedures* include provisions in respect of *Member* qualifications, procedures for voting for *Members*, the term of a *Member*, determination and publication of results of elections and the removal and resignation of a *Member*.

(d) The first *Information Exchange Committee Election Procedures* must be *published* by the time this clause 7.2A.2 comes into operation. The *Information Exchange Committee Election Procedures* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of:

(1) not less than 75% of all *Registered Participants* registered by *AEMO* as *Distribution Network Service Providers* under clause 2.5.1; and

(2) not less than 75% of that class of *Registered Participants* comprising:

(A) *Registered Participants* who are included on the list of *Local Retailers published* by *AEMO*; and

(B) *Market Customers* who are not included on the list of *Local Retailers published* by *AEMO* and who are not a *related body corporate* of a *Local Retailer*.

Neither a *Registered Participant* nor *AEMO* is obliged to comply with an amendment to the *Information Exchange Committee Election Procedures* unless that amendment is made in accordance with this clause. *AEMO* must *publish* the current version of the *Information Exchange Committee Election Procedures*.

(e) A *Registered Participant* must ensure that a person it nominates as a *Member* for a category satisfies the requirements for that particular category of *Member* as set out in the *Information Exchange Committee Election Procedures.*

(f) The first *Information Exchange Committee Operating Manual* must be *published* by the time this clause 7.2A.2 comes into operation. The *Information Exchange Committee Operating Manual* may only be amended in accordance with the procedure set out in the *Information Exchange Committee Election Procedures* and with the support of:

(1) not less than 75% of all *Registered Participants* registered by *AEMO* as *Distribution Network Service Providers* under clause 2.5.1; and

(2) not less than 75% of that class of *Registered Participants* comprising:

(A) *Registered Participants* who are included on the list of *Local Retailers published* by *AEMO*; and

(B) *Market Customers* who are not included on the list of *Local Retailers published* by *AEMO* and who are not a *related body corporate* of a *Local Retailer*.

Neither a *Registered Participant* nor *AEMO* is obliged to comply with an amendment to the *Information Exchange Committee Operating Manual* unless that amendment is made in accordance with this clause. *AEMO* must *publish* the current version of the *Information Exchange Committee Operating Manual*.

(g) The functions and powers of the *Information Exchange Committee* include:

(1) developing, consulting on and making an *Information Exchange Committee Recommendation*;

(2) managing the ongoing development of the *B2B Procedures* and any *changes* to them;

(3) establishing the *Information Exchange Committee Working Groups*;

(4) developing, consulting on and approving the *Information Exchange Committee Works Programme*;

(5) reviewing and considering work completed by the *Information Exchange Committee Working Groups*;

(6) developing proposed amendments to the *Information Exchange Committee Election Procedures*; and

(7) developing proposed amendments to the *Information Exchange Committee Operating Manual*.

(h) The *Information Exchange Committee* must provide to *AEMO* the current version of the *B2B Procedures* and the *Information Exchange Committee Works Programme*.

(i) *AEMO* must *publish* the *B2B Procedures* and the *Information Exchange Committee Works Programme* provided to it by the *Information Exchange Committee*.

(j) The *Information Exchange Committee*, *AEMO*, *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* must comply with the *Information Exchange Committee Election Procedures* and the *Information Exchange Committee Operating Manual*.

(k) The *Information Exchange Committee* must meet at least once every three months.

(l) The quorum for a meeting of the *Information Exchange Committee* is five *Members* comprising two *Distribution Network Service Provider Members,* two *Local Retailer/Market Customer Members* and one *Independent Member*.

(m) A decision of the *Information Exchange Committee* is not valid and enforceable unless it is made as follows:

(1) an *Information Exchange Committee Recommendation* requires the support of six or more *Members*;

(2) any decision that a proposal under clause 7.2A.3(a) should not be considered further after initial consideration under clause 7.2A.3(b), and any decision to not recommend *B2B Procedures* or a *change* to the *B2B Procedures* for approval by *AEMO* requires the support of six or more *Members*;

(3) any decision to approve the *Information Exchange Committee Works Programme* requires the support of six or more *Members*; and

(4) any other decision by the *Information Exchange Committee* requires the support of five or more *Members*.

(n) Each *Member* in performing his or her duties or in exercising any right, power or discretion must have regard to the *B2B Objective* and the *B2B Principles* and must:

(1) at all times act honestly;

(2) exercise the degree of care and diligence that a reasonable person in a like position would exercise;

(3) not make improper use of information acquired by virtue of his or her position to gain, directly or indirectly, an advantage for himself or herself, or the *Registered Participants* by which he or she is employed and/or which nominated him or her to be a *Member*; and

(4) not make improper use of his or her position to gain, directly or indirectly, an advantage for himself or herself or the *Registered Participants* by which he or she is employed and/or which nominated him or her to be a *Member*.

(o) Subject to clause 7.2A.2(n), a *Distribution Network Service Provider Member* may take into account the interests of *Distribution Network Service Providers* in performing his or her duties or in exercising any right, power or discretion.

(p) Subject to clause 7.2A.2(n), a *Local Retailer/Market Customer Member* may take into account the interests of *Local Retailers* and *Market Customers*

in performing his or her duties or in exercising any right, power or discretion.

(q) The *Information Exchange Committee* must prepare the *Information Exchange Committee Annual Report* for the period ended 31 December in the first calendar year following the establishment of the *Information Exchange Committee* and the year ended 31 December in each year thereafter. The *Information Exchange Committee* must provide the *Information Exchange Committee Annual Report* to *AEMO* by the following 31 March and *AEMO* must *publish* that *Information Exchange Committee Annual Report*.

(r) The *Information Exchange Committee Annual Report* must contain the information required by the *Information Exchange Committee Operating Manual.*

(s) By 28 February each year the *Information Exchange Committee* must prepare a draft budget for the following *financial year* in a form which is consistent with the budget procedures of *AEMO*. Following discussion with *AEMO* the *Information Exchange Committee* must prepare a budget by 31 March and provide that budget to *AEMO*. When *AEMO publishes* its budget pursuant to clause 2.11.3, *AEMO* must advise the *Information Exchange Committee* of the final budget for the *Information Exchange Committee* for that *financial year*.

7.2A.3 Method of making and changing B2B Procedures

(a) *AEMO,* a *Local Retailer,* a *Market Customer* or a *Distribution Network Service Provider* may propose *B2B Procedures*, or a *change* to the *B2B Procedures*, to the *Information Exchange Committee*. The proposal must be submitted in writing to the *Information Exchange Committee* and must provide details of the proposal and supporting information, including reasons for any *change* or *B2B Procedure*.

(b) Within 25 *business days* of receipt by the *Information Exchange Committee* of a proposal under clause 7.2A.3(a), the *Information Exchange Committee* must meet to determine whether on a prima facie basis making new *B2B Procedures* and/or *changing* the *B2B Procedures* is warranted having regard to the *B2B Objective* and the *B2B Principles*.

(c) If, after its consideration under clause 7.2A.3(b), the *Information Exchange Committee* decides that the proposal made under clause 7.2A.3(a) should not be considered further, the *Information Exchange Committee* must within five *business days* provide written reasons for that decision to whichever of *AEMO*, the *Local Retailer, Market Customer* or *Distribution Network Service Provider* who made the proposal.

(d) If, after its consideration under clause 7.2A.3(b), the *Information Exchange Committee* decides that the proposal made under clause 7.2A.3(a) should be considered further, the *Information Exchange Committee* must develop the proposal into a *B2B Proposal* (which may differ from the proposal originally made) and an accompanying *B2B Procedures Change Pack* for consultation. The *Information Exchange Committee* must seek *AEMO's* advice on whether a conflict with the *Market Settlement and Transfer Solution Procedures* arises from the *B2B Proposal* and include any such advice in the *B2B Procedures Change Pack.*

(e) The *Information Exchange Committee* must comply with the *Rules consultation procedures* in relation to the *B2B Proposal*. For the purposes of rule 8.9(b), the nominated persons to whom notice must be given are *Local Retailers, Market Customers, Distribution Network Service Providers* and *AEMO*. For the purposes of the notice, the particulars of the matters under consultation must include a copy of the *B2B Procedures Change Pack.*

(f) *AEMO* must *publish* the notice of consultation within 3 *business days* of its receipt and must notify all *Local Retailers, Market Customers* and *Distribution Network Service Providers* of the consultation.

(g) In addition to the matters which rule 8.9(g) requires be included in the draft report, the draft report must contain details of the *Information Exchange Committee's* consideration of the *B2B Objective* and each of the *B2B Principles* and how the *Information Exchange Committee* has considered each submission made having regard to the *B2B Objective* and the *B2B Principles.*

(h) In addition to the matters which rule 8.9(k) requires be included in the final report, the final report must contain details of the *Information Exchange Committee's* consideration of the *B2B Objective* and each of the *B2B Principles* and how the *Information Exchange Committee* has considered each submission having regard to the *B2B Objective* and the *B2B Principles.*

(i) The *Information Exchange Committee* can conclude not to recommend the proposed *B2B Procedures* be made or not to recommend a *change* to the *B2B Procedures*. Alternatively, the *Information Exchange Committee* may make an *Information Exchange Committee Recommendation* and in doing so may recommend a different *B2B Procedure* or *change* to the *B2B Procedures* from that originally proposed under clause 7.2A.3(a). A conclusion not to recommend the proposed *B2B Procedures* be made or not to recommend a *change* to the *B2B Procedures*, or the making of an *Information Exchange Committee Recommendation*, must be included in the final report required under rule 8.9(k).

(j) In coming to a conclusion not to recommend the proposed *B2B Procedures* or not to recommend a *change* to the *B2B Procedures,* or in making an

Information Exchange Committee Recommendation, the *Information Exchange Committee* must seek to achieve the *B2B Objective* and, in seeking to achieve the *B2B Objective*, must have regard to the *B2B Principles*. To the extent of any conflict between the *B2B Principles*, the *Information Exchange Committee* may determine the manner in which those principles can best be reconciled or which of them should prevail.

(k) If the *Information Exchange Committee* recommends not to make the proposed *B2B Procedures* or not to *change* the *B2B Procedures*, *AEMO* must take no further action in respect of the proposal. If the *Information Exchange Committee* makes an *Information Exchange Committee Recommendation*, *AEMO* must consider the *Information Exchange Committee Recommendation* and must approve that *Information Exchange Committee Recommendation,* unless it concludes that:

(1) the *Information Exchange Committee* has failed to have regard to the *B2B Objective* and/or the *B2B Principles*;

(2) the *Information Exchange Committee Recommendation* would conflict with the *Market Settlement and Transfer Solution Procedures*; or

(3) the *Information Exchange Committee* has not followed the *Rules consultation procedures* (as supplemented by this clause 7.2A.3).

(l) In considering an *Information Exchange Committee Recommendation*, *AEMO* must not consider:

(1) the manner in which the *Information Exchange Committee* considered the *B2B Objective* and the *B2B Principles* or the weight given by the *Information Exchange Committee* to the different *B2B Principles* or the balancing between them; or

(2) the merits of the *Information Exchange Committee Recommendation.*

(m) *AEMO* must not amend the Information Exchange Committee Recommendation and must not conduct any further consultation on the Information Exchange Committee Recommendation prior to making its *B2B Decision*.

(n) *AEMO* must *publish* and make available on its website its *B2B Decision*, with reasons, within 10 *business days* of receiving an *Information Exchange Committee Recommendation* from the *Information Exchange Committee*.

(o) If *AEMO* decides not to approve an *Information Exchange Committee Recommendation*, the reasons for the *B2B Decision* which are to be *published* and made available in accordance with clause 7.2A.3(n) must include an explanation of the following, where applicable:

(1) to which of the *B2B Objective* and/or the *B2B Principles AEMO* considers the *Information Exchange Committee* failed to have regard;

(2) how the *Information Exchange Committee Recommendation* would give rise to a conflict with the *Market Settlement and Transfer Solution Procedures;* or

(3) how the *Information Exchange Committee* did not follow the *Rules consultation procedures* (as supplemented by this clause 7.2A.3).

7.2A.4 Content of the B2B Procedures

(a) The *B2B Procedures* may provide for B2B *Communications*.

(b) For each *B2B Communication*, the *B2B Procedures* must contain:

(1) the required *B2B Data* inputs and *B2B Data* outputs;

(2) the required business process flows and related timing requirements;

(3) the required content and format;

(4) the required delivery method; and

(5) the back-up delivery method to be used where the required delivery method cannot be used.

(c) The *B2B Procedures* may include obligations in relation to the information to be maintained and provided to support *B2B Communications.*

(d) For each *B2B Communication* the *B2B Procedures* may also include:

(1) details for testing and certification;

(2) provisions relating to contingency arrangements;

(3) examples of how a *B2B Communication* may operate in practice; and

(4) the method for dealing with a dispute (which may include provisions deferring the use of the dispute resolution procedures in the *Rules* and access to the courts).

(e) The *B2B Procedures* or a *change* to the *B2B Procedures* must also include a date for the commencement of the *B2B Procedures* or the *change*. That date must be not less than 10 *business days* after the related *B2B Decision* is *published*. The *Information Exchange Committee* may extend that date following consultation with *AEMO* and affected *Registered Participants.* If the date is extended by the *Information Exchange Committee*, the

Information Exchange Committee must provide *AEMO* with that date and *AEMO* must *publish* that date.

(f) A *change* to the *B2B Procedures* may also include provisions relating to a date for the end of a process related to a *B2B Communication*. That date may be after the date of commencement of the *change* and may be left to the discretion of the *Information Exchange Committee*. If the date is set by the *Information Exchange Committee*, the *Information Exchange Committee* must provide *AEMO* with that date and *AEMO* must *publish* that date.

(g) The *B2B Procedures* may be constituted by one or more separate documents.

(h) The *B2B Procedures* may include roles and responsibilities for *Metering Providers*.

(i) Subject to the *Information Exchange Committee* following the requirements placed upon it in the *Rules* in relation to the *B2B Procedures, Local Retailers*, *Market Customers*, *Distribution Network Service Providers*, *AEMO* and *Metering Providers* must comply with the *B2B Procedures*.

(k) *Local Retailers, Market Customers* and *Distribution Network Service Providers* may, on such terms and conditions as agreed between them, communicate a *B2B Communication* on a basis other than as set out in the *B2B Procedures*, in which case the parties to the agreement need not comply with the *B2B Procedures* to the extent that the terms and conditions agreed between them are inconsistent with the *B2B Procedures*.

(l) *B2B Data* is *confidential information* and may only be disclosed as permitted by the *Rules*.

(m) If a *change* to the *B2B Procedures* is of a minor or procedural nature or is necessary to correct a manifest error in the *B2B Procedures*, the *Information Exchange Committee* may recommend the *change* to *AEMO* and need not consult on the *change* in accordance with the *Rules consultation procedures*. Clauses 7.2A.3(i) to (o) (inclusive) and clauses 7.2A.4(e) and (f) apply to such a *change* (with any necessary modifications). In addition to *publishing* its *B2B Decision* in relation to such a *change, AEMO* must notify all *Local Retailers, Market Customers* and *Distribution Network Service Providers* of the *change*.

7.2A.5 Transition of B2B Communications from the Market Settlement and Transfer Solution Procedures

(a) At 9.00am (EST), on the day immediately following the day on which the *Information Exchange Committee* is established pursuant to clause 7.2A.2(a) ("**transition day**"):

(1) those *Market Settlement and Transfer Solution Procedures* entitled "MSATS Procedures: B2B Procedures" are deemed to have been the subject of an *Information Exchange Committee Recommendation* under clause 7.2A.3(i) and to have been approved by *NEMMCO* in accordance with clause 7.2A.3(k), and are deemed to be *B2B Procedures*. Such a deemed *Information Exchange Committee Recommendation* and deemed *B2B Decision* are not within the scope of clauses 8.2.5(d1) to (d4) (see clause 8.2A.2(i)); and

(2) any proposed new *Market Settlement and Transfer Solution Procedures* entitled "MSATS Procedures: B2B Procedures", or a change to any *Market Settlement* and *Transfer Solution Procedures* entitled "MSATS Procedures: B2B Procedures", which is the subject of consultation by *NEMMCO* in accordance with the *Rules consultation procedures* on the transition day is deemed to be a valid *B2B Proposal* and, to the extent the *Rules consultation procedures* have been complied with by *NEMMCO*, is deemed to comply with the consultation requirements detailed in clause 7.2A.3(e).

(b) All things done in relation to a *B2B Communication* the subject of those *Market Settlement and Transfer Solution Procedures* entitled "MSATS Procedures: B2B Procedures" immediately before the transition day must under the *B2B Procedures* continue to have the same status, operation and effect as they would have under the *Market Settlement and Transfer Solution Procedures* entitled "MSATS Procedures: B2B Procedures". In particular, this clause 7.2A.5 does not disturb the status, operation or effect of any *B2B Communication* or any proceeding, liability, rights or other matter or thing made, done, effected, obtained, given, accrued, incurred, acquired, existing or continuing before the transition day.

7.2A.6 Cost Recovery

(a) The costs of the development of the *B2B Procedures*, the costs of the establishment and operation of the *Information Exchange Committee* (including the engagement costs of specialist advisers, and the remuneration and payment of the reasonable expenses of the *Independent Members*), all of which must be set out in the budget prepared by the *Information Exchange Committee* pursuant to clause 7.2A.2(s) and the *Information Exchange Committee Annual Report*, and the operational costs associated with any service provided by *AEMO* to facilitate *B2B Communications* (including providing and operating a *B2B e-Hub*) must be paid by *AEMO* in the first instance and recouped by *AEMO* as *Participant fees.*

(b) Subject to clause 7.2A.6(a), the cost of any *Member* (other than an *Independent Member*) and involvement of individuals in the *Information Exchange Committee Working Groups* is not to be borne by *AEMO*.

(c) The cost to a *Local Retailer, Market Customer* and *Distribution Network Service Provider* of implementing and maintaining the necessary systems and processes to ensure compliance with *B2B Procedures* must be met by that *Local Retailer, Market Customer* or *Distribution Network Service Provider.*

7.3 Metering Installation Arrangements

7.3.1A Metering Installation Requirements

(a) Each *connection point* must have a *metering installation.*

(b) *Energy data* is to be based on units of watthour (*active energy*) and where required varhour (*reactive energy*).

7.3.1 Metering installation components

(a) A *metering installation* must:

(1) either contain a device that has a visible or an equivalently accessible display of the cumulative total *energy* measured by that *metering installation* (at a minimum) or, be classified as an *unmetered connection point* in accordance with schedule 7.2 and in which case such a device is not required;

(2) be accurate in accordance with clause 7.3.4;

(3) have *electronic data transfer* facilities from the *metering installation* to the *metering database* in accordance with clause 7.3.5;

(4) contain a *communications link* in accordance with clause 7.2.5(d)(4);

(5) be secure in accordance with rule 7.8;

(6) have electronic data recording facilities such that *active energy* can be collated in accordance with clause 7.9.3;

[**Note:** For the avoidance of doubt, clause 7.3.1(a)(6) relates to a metering installation and not a meter.]

(7) be capable of separately registering and recording flows in each direction where bi-directional *active energy* flows occur;

(8) if a device is used in accordance with subparagraph (1), have a *measurement element* for *active energy* and if required in accordance with schedule 7.2 a *measurement element* for *reactive energy,* both of which have an internal or external *data logger*;

(9) be capable of delivering data from the site of the *metering installation* to the *metering database;*

(10) include facilities on site for storing the *interval energy data* for a period of at least 35 *days* if the *communications link* has a capability for actual *metering data* as required by clause 7.11.1(b) from the site of the *metering point* and the *metering installation* includes the *measurement element(s)* and the *data logger* at the same site;

(11) include facilities on site for storing the *interval energy data* for a period of at least 200 *days* or such other period as specified in the *metrology procedure* if the *communications link* does not have a capability for actual *metering data* as required by clauses 7.11.1(c) or (d) and the *metering installation* includes the *measurement element(s)* and the *data logger* at the same site;

(12) include *metering installation* database facilities for storing *energy data* for a period of at least 35 *days* where the *metering installation* provides for a remote *data logger*;

(13) include *metering installation* database facilities for storing *energy data* for a period of at least 35 *days* where *metering data* is determined for an *unmetered connection point*; and

(14) if a type 6 *metering installation*, include facilities capable of continuously recording by a visible display, the total accumulated *energy* supplied through it over a period of at least 12 months, in accordance with subparagraph (1).

(b) A *metering installation* may consist of combinations of:

(1) a *current transformer*;

(2) a *voltage transformer*;

(3) secure and protected wiring from the *current transformer* and the *voltage transformer* to the *meter*;

(4) an appropriately constructed panel on which the *meter* and the *data logger* are mounted;

(5) a *meter* and a *data logger* which may be either internal or external to the *meter* where a *data logger* may be located at a site remote from the site of a *meter* and a *data logger* may consist of a *metering installation* database that is under the control of the *Metering Provider*;

(6) communication interface equipment such as a modem, isolation requirements, telephone service, radio transmitter and data link equipment;

(7) one or more *communications links* which facilitate the collection of *energy data* from a *data logger* or a *measurement element* so as to enable a remote interface to the *telecommunications network* to be established;

(8) data processing facilities, including algorithms for the preparation of a load pattern(s), for the conversion of *accumulated energy data* or *estimated energy data* into *metering data;*

(9) techniques for the estimation of *market loads* in accordance with schedule 7.2;

(10) auxiliary electricity supply to the *meter*;

(11) an alarm circuit and monitoring facility;

(12) a facility to keep the *metering installation* secure from interference;

(13) test links and fusing;

(14) summation equipment; or

(15) several *metering points* to derive the *metering data* for a *connection point*.

(c) Either a *Local Network Service Provider* or a *Market Participant* may, with the agreement of the *responsible person* (which cannot be unreasonably withheld), arrange for a *metering installation* to contain features in addition to, or which enhance, the features specified in paragraph (b).

(d) The *responsible person* for a *metering installation* must apply to the *Local Network Service Provider* for a National Metering Identifier ('*NMI*').

(e) The *Local Network Service Provider* must issue for each *metering installation* a unique *NMI*.

(f) The *responsible person* must register the *NMI* with *AEMO* in accordance with procedures from time to time specified by *AEMO*.

(g) Where a *metering installation* is used for purposes in addition to the provision of *metering data* to *AEMO* then:

(1) that use must not cause an infringement of the requirements of the *Rules*;

(2) the *responsible person* must co-ordinate with the persons who use the *metering installation* for such other purposes; and

(3) the *metering installation* must comply with the requirements for operational *metering* as detailed in Chapter 4 of the *Rules*.

(h) A *Metering Provider* is entitled to physical access to the site of a *metering installation* in accordance with clause 5.3.7(g) and schedule 5.6.

Requirements for metering installations for non-market generating units

(i) In addition to the requirements in paragraphs (a) to (g), a *metering installation* for a *non-market generating unit* must:

(1) be capable of separately registering and recording flows in each direction where bi-directional *active energy* flows occur;

(2) where payments for the purchase of electricity *generated* by that unit are based on different rates according to the time of the *day*, be capable of recording *interval energy data*;

(3) where a *current transformer,* a *voltage transformer* or a *measurement element* for *reactive energy*, is installed, meet the requirements in schedule 7.2 for the type of *metering installation* appropriate to that *connection point*;

(4) for units with a *nameplate rating* greater than 1 MW, meet:

(i) the accuracy requirements specified in schedule 7.2; and

(ii) the measurement requirements in paragraph (a)(8);

(5) in relation to new accumulation *metering equipment* for units with a *nameplate rating* equal to or less than 1 MW, meet the minimum standards for *active energy* class 1.0 watt-hour or 2.0 watt-hour *meters* in accordance with clause S7.2.6.1(f);

(6) for units with *a nameplate rating* of equal to or less than 1 MW that are capable of recording *interval energy*, meet the minimum standards of accuracy for the *active energy meter* in accordance with schedule 7.2 for a type 3 or 4 *metering installation* which is based on projected sent out annual *energy* volumes; and

(7) if reasonably required by the *Distribution Network Service Provider* (where such a request must be in writing and with reasons), after taking into account the size of the *generating unit*, its proposed role and its location in the *network*, have the *active energy* and *reactive energy* measured where the unit has a *nameplate rating* of less than 1 MW.

7.3.2 Connection and metering point

(a) The *responsible person* must ensure that:

(1) the *revenue metering point* is located as close as practicable to the *connection point*; and

(2) any *instrument transformers* required for a *check metering installation* are located in a position which achieves a mathematical correlation with the *revenue metering data*.

(b) The *Market Participant*, the *Local Network Service Provider* and *AEMO* must use their best endeavours to agree to adjust the *metering data* which is recorded in the *metering database* to allow for physical losses between the *metering point* and the relevant *connection point* where a *meter* is used to measure the flow of electricity in a power conductor.

(c) Where a *Market Network Service Provider* installs a *two-terminal link* between two *connection points, AEMO* in its absolute discretion may require a *metering installation* to be installed in the facility at each end of the *two-terminal link.* Each of these *metering installations* must be separately assessed to determine the requirement for *check metering* in accordance with schedule 7.2.

7.3.3 Use of metering data

(a) *Revenue metering data* must be used by *AEMO* as the primary source of *metering data* for billing purposes.

(b) *Check metering data*, where available, must be used by *AEMO* for:

(1) validation;

(2) substitution; and

(3) account estimation,

of *revenue metering data* as required by clause 7.9.4.

7.3.4 Metering installation types and accuracy

(a) The type of *metering installation* and the accuracy requirements for a *metering installation* which must be installed in respect of each *connection point* are to be determined in accordance with schedule 7.2.

(b) A *check metering installation* is not required to have the degree of accuracy required of a *revenue metering installation* but must have a mathematical correlation with the *revenue metering installation*, and be consistent with the requirements of schedule 7.2.

(c) *Metering installations* in use at *market commencement* must conform with the provisions of Chapter 9.

(d) The accuracy of a type 6 *metering installation* must be in accordance with regulations issued under the *National Measurement Act* or, in the absence of any such regulations, with the *metrology procedure*.

(e) Subject to the *metrology procedure* and this clause 7.3.4, a *financially responsible Market Participant* or a *Local Network Service Provider* may make arrangements with the *responsible person* to alter any type 5, 6 or 7 *metering installation*.

(f) A *Local Network Service Provider* may alter a *metering installation* in accordance with paragraph (e) to make it capable of *remote acquisition* where the *Local Network Service Provider* decides that operational difficulties reasonably require the *metering installation* to be capable of *remote acquisition*.

(g) An alteration of a *metering installation* by a *Local Network Service Provider* in accordance with paragraph (f), does not alter the classification of that installation to a type 4 *metering installation*.

(h) For the purposes of paragraph (f), operational difficulties may include locational difficulties where the *metering installation* is:

(1) at a site where access is difficult; or

(2) on a remote rural property.

(i) A type 5, 6 or 7 *metering installation* must not be altered by the *financially responsible Market Participant* under paragraph (e) until the transfer of the relevant *market load* has been effected by *AEMO* in accordance with the *Market Settlement and Transfer Solution Procedures.*

(j) *AEMO* must develop and *publish* in accordance with the *Rules consultation procedures*, guidelines for the *financially responsible Market Participant* to consider in managing the alteration of a metering installation where one or more devices are to be replaced ('**meter churn guidelines**').

(k) *AEMO* may from time to time and in accordance with the *Rules consultation procedures*, amend or replace the meter churn guidelines referred to in paragraph (j).

(l) *AEMO* must develop and *publish* the first meter churn guidelines under paragraph (j) by 1 January 2008 and there must be such guidelines available at all times after that date.

(m) A *financially responsible Market Participant* who is not the *responsible person* for a *metering installation* that is altered under paragraph (e), must:

(1) consider and manage meter churn consistently with the meter churn guidelines developed by *AEMO* under paragraph (j); and

(2) advise the *responsible person* of the proposed date of alteration:

(i) prior to that alteration being made; and

(ii) in accordance with any time specified in the *Market Settlement and Transfer Solution Procedures*.

7.3.5 Data collection system

(a) **[Deleted]**

(b) *AEMO* must establish processes for the collection of *metering data* for the *metering database* from each *metering installation* in accordance with the requirements of rule 7.9.

(c) *AEMO* may use *agency data collection systems* to collect *metering data,* process *metering data* into *settlements ready data* and to transfer *metering data* to the *metering database.*

(d) *AEMO* may obtain *metering data* directly from a *metering installation* for the *settlements* process.

(e) Rules and protocols in respect of use of a *data collection system* and its connection to a *metering system* must be approved by *AEMO* and *AEMO* must not unreasonably withhold such approval.

(f) Data formats used in respect of a *data collection system* must allow access to *metering data* at a *metering installation* and from the *metering database*.

7.3.6 Payment for metering

(a) Subject to paragraph (b), the financially responsible Market Participant is responsible for payment of all costs associated with the provision, installation, maintenance, routine testing and inspection of the metering installation and includes:

(1) the cost of providing *metering data* and *settlements ready data* to the *Local Network Service Provider* and to the *Local Retailer* to enable these parties to fulfill their obligations under the *Rules*;

(2) the cost of providing *metering data* to *AEMO*;

(3) the cost of preparing *settlements ready data* where such costs will not be recovered by *AEMO* in accordance with paragraph (c); and

(4) the cost of additions and enhancements to *metering installations* undertaken in accordance with clause 7.3.1(c).

(b) If a *responsible person* allows another person to engage a *Metering Provider* to install a *metering installation* in accordance with clause 7.2.5(a)(2), the *financially responsible Market Participant* is not responsible for the payment of the costs of installation of the relevant *metering installation* under paragraph (a).

(c) When *AEMO* is required to undertake functions associated with a *metering installation* in accordance with the requirements of the *metrology procedure* (which could include the preparation and application of a profile), *AEMO's* cost is to be recovered through *Participant fees* in accordance with a budget prepared under clause 2.11.3(b)(3) unless the *metrology procedure* specifies an alternative method of cost recovery, in which case *AEMO* must not recover the costs through *Participant fees*.

(d) Subject to paragraph (a), any costs incurred in gaining access to *metering data* must be paid by the party who obtained the *metering data.*

(e) The cost of requisition testing and audits must be paid by the party requesting the test or audit, except where the *metering installation* is shown not to comply with this Chapter 7, in which case the *responsible person* in relation to that *metering installation* must bear the cost.

(f) Paragraph (a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of type 5, 6 or 7 *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with a determination made by the *AER*.

(g) Where:

(1) a *financially responsible Market Participant* alters a type 5, 6 or 7 *metering installation* under clause 7.3.4 that leads to a change in the classification of that *metering installation*; and

(2) the *Local Network Service Provider* is no longer the *responsible person* for that *metering installation*,

the parties must negotiate in good faith to ensure the *Local Network Service Provider* is reasonably compensated for the alteration to the *metering installation*.

7.4 Metering Providers

7.4.1 Responsibility

(a) Installation and maintenance of *metering installations* must be carried out only by a *Metering Provider*.

(b) A *Metering Provider* is responsible for providing and maintaining the security controls of a *metering installation* in accordance with clause 7.8.2.

7.4.2 Qualifications and registration of Metering Providers

(a) A *Metering Provider* is a person who:

(1) meets the requirements set out in schedule 7.4; and

(2) is accredited by and registered by *AEMO* in that capacity in accordance with the qualification process established under clause S7.4.1(b).

(b) Any person may apply to *AEMO* for accreditation and registration as a *Metering Provider*.

(ba) *AEMO* must, in accordance with *Rules consultation procedures,* prepare and *publish* guidelines in respect of the accreditation of *Metering Providers*. The adoption of the guidelines by *Metering Providers* is to be included in the qualification process in accordance with clause S7.4.1(b). The guidelines must include a dispute resolution process.

(bb) A *Metering Provider* must comply with the provisions of the *Rules* and of procedures authorised under the *Rules*, and with any requirements established by *AEMO* under clause 7.4.2(bc), that are expressed to apply to *Metering Providers*.

(bc) The requirements referred to in clause 7.4.2(bb):

(1) must include the service level requirements with which the different categories of *Metering Providers* referred to in schedule 7.4 must comply; and

(2) may include, among other things, requirements relating to cooperation with *AEMO* and any person engaged by *AEMO* to operate any relevant *agency metering database*, the confidentiality of information collected by *Metering Providers*, the resolution of disputes between *AEMO* and *Metering Providers*, the access of *AEMO* to and inspection by *AEMO* of any equipment or database maintained by *Metering Providers*, the insurance which must be taken out by or on behalf of *Metering Providers*, subcontracting by *Metering Providers*, the software and systems that are used by *Metering Providers*, the

ownership of intellectual property that is developed or used by *Metering Providers*, and the delivery up to *AEMO* of data, works, material and other property in the event of the deregistration of a *Metering Provider*.

As at the date the *Rules* commence operation, the requirements referred to in clause 7.4.2(bb) that apply in respect of a category of *Metering Providers* referred to in schedule 7.4 must be the same as those that applied in respect of that category of *Metering Providers* immediately prior to that date, but *AEMO* may from time to time amend such requirements in accordance with the *Rules consultation procedures*.

(c) *Network Service Providers* must either register as a *Metering Provider* or enter into agreements with *Metering Providers* for the provision of *metering services.*

(ca) A *Network Service Provider* must allow a person other than a *Market Participant* to engage a *Metering Provider* to install a *metering installation* where the person does so in accordance with the *metrology procedure*.

(d) Subject to clause 7.4.2(e), a *Market Generator* or *Market Customer* which is involved in the trading of *energy* must not be registered as a *Metering Provider* for *connection points* in respect of which the *metering data* relates to its own use of *energy*.

(e) If a *Market Participant* is a *Market Customer* and also a *Network Service Provider* then the *Market Participant* may be registered as a *Metering Provider* for that *connection point* as specified in clause 7.4.2(d), providing that at the *connection points* on the *transmission network*, the *Market Participant* must regard the *Transmission Network Service Provider* with which it has entered into a *connection agreement* as the *Local Network Service Provider*.

7.4.3 Deregistration of Metering Providers

(a) If a *Metering Provider* materially breaches the requirements of clause 7.4.2(bb), *AEMO* must send to that *Metering Provider* notice in writing setting out the nature of the breach and, if the *Metering Provider* remains in breach for a period of more than 7 *days* after notice from *AEMO, AEMO* may deregister the *Metering Provider*.

(aa) If *AEMO* reasonably determines that a *Metering Provider* may have breached the requirements of clause 7.4.2(bb), it must conduct a review of the *Metering Provider's* capability to install and maintain a *metering installation*. The outcome of the review may be deregistration, suspension of some categories of registration or continued operation under constraints agreed with *AEMO*.

(b) If, in the reasonable opinion of *AEMO*, a *Metering Provider* has acted in any way which is unethical, *AEMO* may deregister that *Metering Provider*.

(c) This clause 7.4.3 sets out the only action that can be taken against a *Metering Provider*:

(1) for a breach by that *Metering Provider* of provisions of the *Rules* or of procedures authorised under the *Rules*, or of any requirements established by *AEMO* under clause 7.4.2(bc), that are expressed to apply to *Metering Providers*; or

(2) by *AEMO* as a result of that *Metering Provider* acting in a way which is unethical.

7.5 Register of Metering Information

7.5.1 Metering register

(a) As part of the *metering database*, *AEMO* must maintain a *metering register* of all *revenue metering installations* and *check metering installations* which provide *metering data* used for *AEMO* account statements.

(b) The *metering register* referred to in clause 7.5.1(a) must contain the information specified in schedule 7.5.

7.5.2 Metering register discrepancy

(a) If the information in the *metering register* indicates that the *revenue metering installation* or the *check metering installation* does not comply with the requirements of the *Rules*, *AEMO* must advise affected *Registered Participants* of the discrepancy.

(b) If a discrepancy under clause 7.5.2(a) occurs, then the *responsible person* must arrange for the discrepancy to be corrected within 2 *business days* unless exempted by *AEMO*.

7.6 Inspection, Testing and Audit of Metering Installations

7.6.1 Responsibility for testing

(a) Testing of a *metering installation* carried out under this clause 7.6.1 must be carried out in accordance with:

(1) this clause 7.6.1; and

(2) the relevant inspection and testing requirements set out in schedule 7.3.

(b) A *Registered Participant* may request that the *responsible person* make arrangements for the testing of a *metering installation* and if the request is reasonable, the *responsible person* must:

(1) not refuse the request; and

(2) make arrangements for the testing.

(c) Where the *responsible person* does not undertake the testing requested under paragraph (b), the *responsible person* must advise *AEMO* that the requested testing has not been undertaken and *AEMO* must make the arrangements for the testing where, in *AEMO's* reasonable opinion, it is practicable for *AEMO* to do so.

(d) The *Registered Participant* who requested the tests under paragraph (b) may make a request to the *responsible person* to witness the tests.

(e) The *responsible person* must not refuse a request received under paragraph (d) and must no later than 5 *business days* prior to the testing, advise:

(1) the party making the request; and

(2) where the *Local Network Service Provider* is the *responsible person*, the *financially responsible Market Participant*,

of:

(3) the location and time of the tests; and

(4) the method of testing to be undertaken.

(f) The *responsible person* and *AEMO* must co-operate for the purpose of making arrangements for *AEMO* to inspect or test the *metering installation* where:

(1) the *responsible person* must give *AEMO* access to the *metering installation*; and

(2) *AEMO* must:

(i) no later than seven *business days* prior to the testing or inspection, give the *responsible person* notice of:

(A) its intention to access the *metering installation* for the purpose of inspection or testing;

(B) the name of the *representative* who will be conducting the test or inspection on behalf of *AEMO*; and

(C) the *time* when the test or inspection will commence and the expected *time* when the test or inspection will conclude; and

(ii) where reasonable, comply with the security and safety requirements of the *responsible person*.

(g) Where *AEMO* or the *responsible person* has undertaken testing of a *metering installation* under this clause 7.6.1, *AEMO* or the *responsible person* (as the case may be) must make the test results available in accordance with paragraphs (h) and (i).

(h) If the test results referred to in paragraph (g) indicate deviation from the technical requirements for that *metering installation*, the results must be made available as soon as practicable to the persons who are entitled to that *metering data* under rules 7.7(a)(1) to (7).

(i) If the test results referred to in paragraph (g) indicate compliance with the technical requirements for that *metering installation*, the test results must be made available as soon as practicable:

(1) in circumstances where the tests were requested by a *Registered Participant*, to the *Registered Participant* and persons who are entitled to that *metering data* under rules 7.7(a)(1) to (7); or

(2) to a *Registered Participant* if requested by that *Registered Participant*, where the tests are not the result of a request for testing.

(j) *AEMO* must check test results recorded in the *metering register* by arranging for sufficient audits annually of *metering installations* and to satisfy itself that the accuracy of each *metering installation* complies with the requirements of this Chapter 7.

(k) The *responsible person* must store the test results in accordance with clause 7.6.4 and provide a copy to *AEMO* upon request or as part of an audit.

7.6.2 Actions in event of non-compliance

(a) If the accuracy of the *metering installation* does not comply with the requirements of the *Rules,* the *responsible person* must:

(1) advise *AEMO* as soon as practicable of the errors detected and the possible duration of the existence of the errors; and

(2) arrange for the accuracy of the *metering installation* to be restored in a time frame agreed with *AEMO.*

(b) *AEMO* may make appropriate corrections to the *metering data* to take account of errors referred to in clause 7.6.2(a) and to minimise adjustments to the final *settlements* account.

7.6.3 Audits of metering data

(aa) *AEMO* is responsible for auditing *metering installations.*

(a) A *Registered Participant* may request *AEMO* to conduct an audit to determine the consistency between the data held in the *metering database* and the data held in the *Registered Participant's metering installation*.

(b) If there are inconsistencies between data held in a *metering installation* and data held in the *metering database* the affected *Registered Participants* must liaise together to determine the most appropriate way to resolve the discrepancy.

(c) If there is an inconsistency between the data held in a *metering installation* and the data held in the *metering database*, the data in the *metering installation* is to be taken as prima facie evidence of the *connection point's energy data*.

(d) *AEMO* must carry out periodic random audits of *metering installations* to confirm compliance with the *Rules* and must be given unrestrained access by *Registered Participants* to *metering installations* for the purpose of carrying out such random audits where *AEMO* agrees to comply with the *Registered Participant's* reasonable security and safety requirements and has first given the *Registered Participant* at least two *business days'* notice of its intention to carry out an audit, which notice must include:

(1) the name of the *representative* who will be conducting the audit on behalf of *AEMO*; and

(2) the *time* when the audit will commence and the expected *time* when the audit will conclude.

7.6.4 Retention of test records and documents

(a) All records and documentation of tests prepared under this Chapter 7 or for the purposes of this Chapter 7 must be retained in accordance with this clause 7.6.4.

(b) The *responsible person* must ensure records and documentation are retained as follows:

(1) for a period of at least 7 years:

(i) sample testing of *meters* while the *meters* of the relevant style remain in service;

(ii) the most recent sample test results of the *meters* referred to in subparagraph (i) after the *meters* are no longer in service;

(iii) non-sample testing of *meters* while the *meters* remain in service;

(iv) the most recent non-sample test results after the *meters* are no longer in service;

(v) the most recent sample test results of *instrument transformers* after *instrument transformers* of the relevant type are no longer in service;

(vi) the most recent non-sample test results of *instrument transformers* after they are no longer in service;

(vii) tests of new *metering* equipment of the relevant style while the equipment remains in service; and

(viii) tests of new *metering* equipment of the relevant style after the equipment is no longer in service; and

(2) for a period of at least 10 years:

(i) sample testing of *instrument transformers* while *instrument transformers* of the relevant type remain in service; and

(ii) non-sample testing of *instrument transformers* while they remain in service.

(c) The *responsible person* must ensure records of type tests and pattern approvals carried out or obtained in accordance with clause S7.2.6.1(f) are retained while *metering* equipment of the relevant type remains in service and for at least 7 years after it is no longer in service.

7.7 Entitlement to metering data

(a) The only persons entitled to receive *metering data*, *NMI Standing Data* or data from the *metering register* for a *metering installation* are:

(1) *Registered Participants* with a financial interest in the *metering installation* or the *energy* measured by that *metering installation*;

(2) *Metering Providers* who have an agreement to service the *metering installation,* in which case the entitlement to access is restricted to allow authorised work only;

(3) *financially responsible Market Participants* in accordance with the *meter churn guidelines* developed under clause 7.3.4(j);

(4) the *Network Service Provider* or providers associated with the *connection point*;

(5) *AEMO* and its authorised agents;

(6) an Ombudsman in accordance with paragraphs (d), (e) and (f);

(7) a *financially responsible Market Participant's* customer upon request by that customer to the *financially responsible Market Participant* for information relating to that customer's *metering installation*; and

(8) the *AER* or *Jurisdictional Regulators* upon request to *AEMO*.

(b) Electronic access to *metering data* from a *metering installation* must only be provided where passwords in accordance with clause 7.8.2 are allocated, otherwise access to *metering data* shall be from the *metering database*.

(c) The *responsible person* must ensure that access to *metering data* from the *metering installation* by persons referred to in rule 7.7(a) is scheduled appropriately to ensure that congestion does not occur.

(d) Despite anything to the contrary in this rule 7.7, *AEMO* may provide *metering data* relating to a *Registered Participant* from a *metering installation*, the *metering database* or the *metering register* to an Ombudsman acting under a duly constituted industry dispute resolution ombudsman scheme of which the *Registered Participant* is a participant, if the Ombudsman has requested the data for the purpose of carrying out a function of that scheme in respect of a complaint made by a customer of the *Registered Participant* against that *Registered Participant* under that scheme.

(e) *AEMO* must notify the relevant *Registered Participant* of any information requested by an Ombudsman under rule 7.7(d) and, if it is requested by that *Registered Participant*, supply the *Registered Participant* with a copy of any information provided to the Ombudsman.

(f) *AEMO* must, acting jointly with industry Ombudsmen, develop procedures for the efficient management of timely access to data by Ombudsmen in consultation with *Registered Participants* in accordance with the *Rules consultation procedures.*

7.8 Security of Metering Installations and Data

7.8.1 Security of metering installations

(a) The *responsible person* must ensure that a *metering installation* is secure and that associated links, circuits and information storage and processing systems are protected by security mechanisms acceptable to *AEMO*.

(b) *AEMO* may override any of the security mechanisms fitted to a *metering installation* with prior notice to the *responsible person*.

(c) If a *Local Network Service Provider*, *financially responsible Market Participant*, or *Metering Provider* becomes aware that a seal protecting *metering* equipment has been broken, it must notify the *responsible person* within 5 *business days*.

(d) If a broken seal has not been replaced by the person who notified the *responsible person* under paragraph (c), the *responsible person* must replace the broken seal no later than:

(1) the first occasion on which the *metering* equipment is visited to take a reading; or

(2) 100 days,

after receipt of notification that the seal has been broken.

(e) The costs of replacing broken seals as required by paragraph (d) are to be borne by:

(1) the *financially responsible Market Participant* if the seal was broken by its customer;

(2) a *Registered Participant* if the seal was broken by the *Registered Participant*; or

(3) by the *Metering Provider* if the seal was broken by the *Metering Provider*,

and otherwise by the *responsible person*.

(f) If it appears that as a result of, or in connection with, the breaking of a seal referred to in paragraph (c) that the relevant *metering* equipment may no longer meet the relevant minimum standard, the *responsible person* must ensure that the *metering* equipment is tested.

7.8.2 Security controls

(a) The *responsible person* must ensure that *metering data* held in the *metering installation* is protected from direct local or remote electronic access by suitable password and security controls in accordance with clause 7.8.2(c).

(b) The *Metering Provider* must keep records of electronic access passwords secure.

(c) The *Metering Provider* must allocate 'read-only' passwords to *Market Participants*, *Local Network Service Providers* and *AEMO*, except where separate 'read-only' and 'write' passwords are not available, in which case the *Metering Provider* must allocate a password to *AEMO* only.

(d) The *Metering Provider* must hold 'read-only' and 'write' passwords.

(e) The *Metering Provider* must forward a copy of the passwords held under clause 7.8.2(d) to *AEMO*.

(f) Subject to rule 7.12(aa), *AEMO* must hold a copy of the passwords referred to in clause 7.8.2(e) for the sole purpose of revealing them to a *Metering Provider* in the event that the passwords cannot be obtained by the *Metering Provider* by any other means.

(g) Subject to the authorisation of the *responsible person*, if a customer of a *financially responsible Market Participant* requests a 'read-only' password, the *financially responsible Market Participant* must:

(1) obtain a 'read-only' password from the *Metering Provider*; and

(2) provide a 'read-only' password to the customer within 10 *business days*,

in accordance with paragraph (c).

(h) The *responsible person* referred to in paragraph (g) must not unreasonably withhold the authorisation required by the *financially responsible Market Participant*.

7.8.3 Changes to metering equipment, parameters and settings

Changes to parameters or settings within a *metering installation* must be:

(a) authorised by *AEMO* prior to the alteration being made;

(b) implemented by a *Metering Provider*;

(c) confirmed by the *responsible person* within 2 *business days* after the alteration has been made; and

(d) recorded by *AEMO* in the *metering register*.

7.8.4 Changes to metering data

(a) The original stored *energy data* in a *meter* must not be altered except when the *meter* is reset to zero as part of a repair or reprogramming.

(b) If an on-site test of a *metering installation* requires the injection of current, the *responsible person* must ensure that:

(1) the *energy data* stored in the *metering installation* is inspected; and

(2) if necessary following the inspection under subparagraph (1), alterations are made to the *metering data* in accordance with paragraph (c),

to ensure that the *metering data* in the *metering database* is not materially different from the energy volumes flowing through the *connection point* during the period of the test.

(c) If a *responsible person* considers alterations are necessary under paragraph (b)(2), the *responsible person* must:

(1) for a type 1, 2, 3 or 4 *metering installation*, advise *AEMO* of the variation and *AEMO* must arrange for the *metering database* to be altered in accordance with the validation, substitution and estimation procedures in the *metrology procedure*; or

(2) for a type 5, 6 or 7 *metering installation*, alter the *energy data* in accordance with the validation, substitution and estimation procedures in the *metrology procedure* and submit the altered data to *AEMO*.

(d) If a test referred to in paragraph (b) is based on actual *connection point* loads, no adjustment is required.

7.9 Processing of Metering Data for Settlements Purposes

7.9.1 Metering databases

(a) *AEMO* must create, maintain and administer a *metering database* (either directly or under a contract for provision of the database) containing information for each *metering installation* registered with *AEMO.*

(b) *AEMO* may use *agency metering databases* to form part of the *metering database*.

(b1) A person engaged by *AEMO* to provide *agency data collection systems* and *agency metering databases* must meet and comply with the service level

requirements and any other criteria that *AEMO* establishes from time to time in relation to those functions, including accreditation requirements.

(c) The *metering database* must have the capacity for electronic access by relevant *Market Participants* and *Network Service Providers*.

(d) The *metering database* must include original *energy* readings and, where relevant, *metering data* and *settlements ready data*.

(e) Rights of access to data held within the *metering database* are set out in rule 7.7.

(f) The person who is required under this Chapter 7 to collect the *metering data* from the *metering installation* for the purpose of *settlements* must ensure that:

(1) the data is stored separately from the *metering database* and retained for a period of 7 years in the form in which it was collected; and

(2) a record of each adjustment or substitution to the *metering data* in respect of a *metering installation* is stored separately from the *metering database* and retained for a period of 7 years.

(g) For all types of *metering installations*, the *metering database* must contain *metering data* that is retained:

(1) online for 13 months in an accessible format; and

(2) following the retention under subparagraph (1), in archive in a form that is accessible independently of the format in which the data is stored for a period of 5 years and 11 months.

7.9.2 Remote acquisition of data

(a) *AEMO* is responsible for the *remote acquisition* of the *metering data* and for storing this data as *settlements ready data* in the *metering database*. Such data may be used:

(1) by *AEMO* for *settlements* purposes in accordance with clause 7.9.1; or

(2) by *Distribution Network Service Providers* for the purpose of determining *distribution service* charges in accordance with clause 6.20.1.

(b) If *remote acquisition* becomes unavailable, *AEMO* must arrange with the *responsible person* to obtain the relevant *metering data*.

7.9.3 Periodic energy metering

(a) Where a device is used as a *data logger* (for types 1 to 5 *metering installations*), *metering data* relating to:

(1) the amount of *active energy*; and

(2) *reactive energy* (where relevant) passing through a *connection point*,

must be collated in *trading intervals* within a *metering installation* unless it has been agreed between *AEMO*, the *Local Network Service Provider* and the *Market Participant* that *metering data* may be recorded in sub-multiples of a *trading interval*.

(b) Where a *metering installation* database is used as a *data logger (metering installation* types 6 and 7), the *metering data* relating to the amount of *active energy* passing through a *connection point* must be collated or determined in *trading intervals* within a *metering installation* unless it is specified in the *metrology procedure* that the data may be converted into *trading interval* data in the *AEMO* substitution process referred to in clause 7.9.4(a), in which case the *metrology procedure* must specify:

(1) the parameters to be used in preparing the *trading interval* data for each *market load*, including the algorithms;

(2) the first-tier *energy data* that is to be used in the conversion process;

(3) the quality and timeliness of the first-tier *metering data*;

(4) the party responsible for providing the first-tier *metering data*; and

(5) if required, the method of cost recovery in accordance with clause 7.3.6(c).

7.9.4 Data validation, substitution and estimation

(a) *AEMO* is responsible for the validation and substitution of *metering data* for a type 1, 2, 3 and 4 *metering installation* in accordance with the *metrology procedure*.

(b) The *responsible person* is responsible for the validation, substitution and estimation of *metering data* for a type 5, 6 and 7 *metering installation* in accordance with the *metrology procedure*.

(c) *Check metering data*, where available, must be used by *AEMO* to validate *metering data* provided that the *check metering data* has been appropriately adjusted for differences in *metering installation* accuracy.

(d) If *check metering data* is not available or *metering data* cannot be recovered from the *check metering installation* within the time required for *settlements*, then a substitute value is to be prepared by *AEMO* using a method agreed with the *Market Participant* and the *Local Network Service Provider*.

(e) If *AEMO* detects a loss of *metering data* or incorrect *metering data* from a *metering installation*, it must notify the *Market Participant* and *Local Network Service Provider* within 24 hours of detection.

7.9.5 Errors found in metering tests, inspections or audits

(a) If a *metering installation* test, inspection or audit, carried out in accordance with rule 7.6, demonstrates errors in excess of those prescribed in schedule 7.2 and *AEMO* is not aware of the time at which that error arose, the error is to be deemed to have occurred at a time half way between the time of the most recent test or inspection which demonstrated that the *metering installation* complied with the relevant accuracy requirement and the time when the error was detected.

(b) If a test or audit of a *metering installation* demonstrates an error of measurement of less than 1.5 times the error permitted by schedule 7.2, no substitution of readings is required unless in *AEMO's* reasonable opinion a particular party would be significantly affected if no substitution were made.

(c) If any substitution is required under clause 7.9.5(b), then *AEMO* must provide substitute readings to effect a correction for that error in respect of the period since the error was deemed to have occurred.

7.10 Confidentiality

Metering data and passwords are confidential data and are to be treated as *confidential information* in accordance with the *Rules*.

7.11 Performance of Metering Installation

7.11.1 Metering data

(a) Subject to paragraphs (b) and (c), *metering data* is required for all *trading intervals* where the *metering installation* has the capability for *remote acquisition* of actual *metering data*.

(b) Where *AEMO* requires actual *metering data* to ensure compliance with Chapter 3, the *metering data* required under paragraph (a) must be:

(1) at the level of accuracy prescribed in schedule 7.2;

(2) within the timeframe required for *settlements* and *prudential requirements* specified in the *metrology procedure*, and at a level of availability of at least 99% per annum for *instrument transformers* and other components of the *metering installations*, not including the *communication link*;

(3) within the timeframe required for *settlements* and *prudential requirements* specified in the procedures established in the *metrology procedure*, and at a level of availability of at least 95% per annum for the *communication link*, and

(4) actual or substituted in accordance with the procedures established by *AEMO* under clause 7.14.1(c)(6);

or as otherwise agreed between *AEMO* and the *responsible person*.

(c) Where *AEMO* does not require actual *metering data* to ensure compliance with Chapter 3, the *metering data* required under paragraph (a) must be:

(1) at the level of accuracy prescribed in schedule 7.2;

(2) within the timeframe required for *settlements* specified in the *metrology procedure*;

(3) actual, substituted or estimated in accordance with the procedures established by *AEMO* under clause 7.14.1(c)(6); and

(4) in accordance with the performance standards specified in the *metrology procedure*.

(d) Where the *metering installation* does not have the capability for *remote acquisition* of actual *metering data*, *metering data* is required:

(1) at the level of accuracy prescribed in schedule 7.2;

(2) within the timeframe required for *settlements* specified in the *metrology procedure*;

(3) as actual, substituted or estimated in accordance with the procedures established by *AEMO* under clause 7.14.1(c)(6); and

(4) in accordance with the performance standards specified in the *metrology procedure*.

7.11.2 Metering installation malfunctions

(a) Unless an exemption is obtained from *AEMO* under this clause 7.11.2, in respect of a *connection point* with:

(1) a type 1, 2 and 3 *metering installation*, if a malfunction occurs to the installation, repairs must be made to it as soon as practicable but no later than 2 *business days* after the malfunction was detected or should reasonably have been detected; or

(2) a *metering installation* other than the installations referred to subparagraph (1), if a malfunction occurs to the installation, repairs must be made to it as soon as practicable but no later than 10 *business days* after the malfunction was detected or ought reasonably to have been detected.

(b) *AEMO* must establish and *publish* a procedure applicable to the provision of exemptions for the purpose of paragraph (a) and *AEMO* may revise the procedure from time to time.

(c) If an exemption is provided by *AEMO* under this clause 7.11.2 then the *Metering Provider* must provide *AEMO* with a plan for the rectification of the *metering installation.*

(d) A *Registered Participant* who becomes aware of an *outage* or malfunction of a *metering installation* must advise *AEMO* as soon as practicable.

7.12 Time settings

(a) The *responsible person* must ensure that all *metering installations* and *data logger* clocks are referenced to *Eastern Standard Time* and maintained to a standard of accuracy in accordance with schedule 7.2 relevant to the *load* through the *metering point*.

(b) In relation to a type 1, 2, 3 and 4 *metering installation*, the *responsible person* must provide to *AEMO* suitable remote data access to set the time function of the installation.

(c) In relation to a type 5, 6 and 7 *metering installation*, the *responsible person* must set the time function of the *metering installation*.

(d) *AEMO* must ensure that the *metering database* clock is maintained within -1 second and +1 second of *Eastern Standard Time* for a type 1, 2, 3 and 4 *metering installation*.

(e) The *responsible person* must ensure that the *metering installation* database clock is maintained within - 1 second and + 1 second of *Eastern Standard Time* for types 5, 6 and 7 *metering installations*.

7.13 Evolving Technologies and Processes and Development of the Market

(a) Evolving technologies or processes that:

(1) meet or improve the performance and functional requirements of this Chapter; or

(2) facilitate the development of the *market*,

may be used if agreed between the relevant *Market Participant(s)*, the *Local Network Service Provider* and *AEMO*, and the agreement of the *Local Network Service Provider* and *AEMO* must not be unreasonably withheld.

(b) No agreement contemplated by rule 7.13(a) can be entered into if it materially and adversely affects the interests of persons other than the *Market Participant(s)* and the *Local Network Service Provider* who are parties to the agreement.

(c) *AEMO* must, at least annually, *publish* a report on the application of evolving technologies and processes.

(d) *AEMO* must, at least annually, submit a written report to the *AEMC* on the extent to which this Chapter 7 may need to be amended in order to accommodate the evolving technologies and processes or the development of the *market*.

(e) *AEMO* must, at least annually, prepare and *publish* a report on the impact of the introduction of retail competition on the wholesale market, including:

(1) the scope for improvement in the operation of wholesale *market settlements*;

(2) developments in metering technology suited to more timely operation of the *market;* and

(3) the effectiveness of the provisions of this Chapter 7.

(f) Having regard to the need to remove barriers to the adoption of economically efficient metering solutions and other economically efficient technology ('**efficient solutions**'), *AEMO* must:

(1) monitor developments in the Australian metering standards; and

(2) consult with the *participating jurisdictions* and other interested parties on any changes proposed to be made to the Australian metering standards that may have the potential to create such barriers,

and include any relevant findings in its report under paragraph (c).

(g) The *Ministers of participating jurisdictions* must, by 30 June 2009, conduct and complete a review of type 5 and 6 *metering installations* and the *metrology procedure*.

(h) In undertaking the review referred to in paragraph (g), the *Ministers of the participating jurisdictions* may:

(1) review the outcomes from the Joint Jurisdictional Review of Metrology Procedures: Final Report of October 2004 ('the **JJR report**') and identify any outstanding issues from the JJR report;

(2) make recommendations to resolve any outstanding issues from the JJR report;

(3) identify any additional barriers to the adoption of efficient solutions and make recommendations to reduce those barriers; and

(4) have regard to the need to maintain the regulatory certainty, in recognition that regulatory uncertainty is itself a major barrier to the adoption of efficient solutions.

7.14 Metrology procedure

7.14.1 Requirements of the metrology procedure

(a) *AEMO* must develop and *publish* the *metrology procedure* that will apply to *metering installations* in accordance with this rule 7.14 and this Chapter 7.

(b) The *metrology procedure* must be prepared, revised and *published* by *AEMO* in accordance with the *Rules consultation procedures* and must include a minimum period of 3 months between the date when the *metrology procedure* is *published* and the date the *metrology procedure* commences unless the change is made under clause 7.14.4(e) in which case the effective date may be the same date as the date of publication.

(c) The *metrology procedure* must include:

(1) information on the devices and processes that are to be used to:

(i) measure, or determine by means other than a device, the flow of electricity in a power conductor;

(ii) convey the measured or determined data under subparagraph (i) to other devices using c*ommunication link(s)*;

(iii) prepare the data using devices or algorithms to form *metering data*; and

(iv) provide access to the *metering data* from a *telecommunications network*;

(2) the requirements for the provision, installation and maintenance of *metering installations*;

(3) the obligations of *responsible persons* and *Metering Providers*;

(4) details on:

(i) the parameters that determine the circumstances when *metering data* must be delivered to *AEMO* for the purposes of Chapter 3 and such parameters must include, but are not limited to, the volume limit per annum below which *AEMO* will not require *metering data* for those purposes;

(ii) the timeframe obligations for the extraction or delivery of *metering data* from a *metering installation* for the purpose of *settlements*; and

(iii) the performance standards for *metering data* required for the purpose of *settlements*;

(5) subject to clause 7.14.2(d)(2), zero MWh as the specification for the *type 5 accumulation boundary*;

(6) procedures for the preparation of *settlements ready data* on the following matters:

(i) data validation and substitution in accordance with clause 7.9.4;

(ii) data estimation for the purposes of clause 7.11.1; and

(iii) in relation to the matters specified in clause 7.9.3, the method:

(A) by which accumulated *metering data* is to be converted into *trading interval* data; and

(B) of managing the *first-tier load energy data* that is necessary to enable the conversion referred to in subparagraph (1) to take place; and

(7) other matters in the *Rules* required to be included in the *metrology procedure*.

7.14.2 Jurisdictional metrology material in metrology procedure

(a) Subject to this clause 7.14.2, *AEMO* may include in the *metrology procedure* other metrology material that is in the nature of a guideline, specification or other standard for a *participating jurisdiction* in relation to type 5, 6 and 7 *metering installations* which alters the application of the *metrology procedure* for that jurisdiction (‘*jurisdictional metrology material’*).

(b) *Jurisdictional metrology material* may only be submitted to *AEMO* for inclusion in the *metrology procedure* by the *Ministers of the MCE*.

[**Note:** For the period until 1 January 2009, a *Minister of a participating jurisdiction*, on behalf of a particular participating jurisdiction, may provide to NEMMCO jurisdictional metrology material in accordance with clause 11.5.5]

(c) *Jurisdictional metrology material* submitted to *AEMO* under paragraph (b) must:

(1) be in writing;

(2) be provided to *AEMO* within sufficient time for *AEMO* to meet its obligations under this clause 7.14.2;

(3) be consistent with the matters contained in clauses 7.14.1 and 7.14.3;

(4) contain a date by which the *Ministers of the MCE* will undertake a review in relation to harmonising the *jurisdictional metrology material* with the *metrology procedure* (the '**review date**'); and

(5) be accompanied by written reasons as to why the *jurisdictional metrology material* is required instead of the *metrology procedure*.

(d) *Jurisdictional metrology material* may address the following matters:

(1) guidelines for the replacement of a device capable of producing *interval energy data* with a device that only produces *accumulated energy data*; and

(2) the specification of the *type 5 accumulation boundary*.

(e) On receiving *jurisdictional metrology material* from the *Ministers of the MCE*, *AEMO* must undertake the *Rules consultation procedures* in relation to that material, including in that consultation the reasons referred to paragraph (c)(5).

(f) At the conclusion of the *Rules consultation procedure*s under paragraph (e), *AEMO* must provide a final report to the *Ministers of the MCE* in accordance with rule 8.9(k) of the outcome of that procedure and:

(1) in the case where the *Ministers of the MCE* do not advise *AEMO* of any amendments to the *jurisdictional metrology material, AEMO* must incorporate that material into a separate part of the *metrology procedure*; or

(2) in the case where the *Ministers of the MCE* advise *AEMO* of amendments to the *jurisdictional metrology material*, *AEMO* must

incorporate the amended material into a separate part of the *metrology procedure*.

(g) The *jurisdictional metrology material*, as included in the *metrology procedure* by *AEMO*, expires on the review date unless the *Ministers of the MCE* submit to *AEMO* new *jurisdictional metrology material* in accordance with this clause 7.14.2.

(h) The *jurisdictional metrology material* must not prevent the *metering data* from being extracted or emanating from a *data logger* as *interval energy data* if required by the *financially responsible Market Participant* or a *Local Network Service Provider* for any purpose other than for *settlements*.

7.14.3 Additional matters

(a) The *metrology procedure* may:

(1) clarify the operation of the *Rules* in relation to:

(i) *load* profiling;

(ii) the provision and maintenance of *meters*;

(iii) the provision of *energy data services*;

(iv) metrology for a *market load* connected to a *network* where the owner or operator of that *network* is not a *Registered Participant*;

(v) the accreditation of *Metering Providers*; and

(vi) the obligations of *responsible persons*, *AEMO*, and *Metering Providers*;

(2) specify in greater detail:

(i) the accuracy of *metering installations*;

(ii) *data logger* standards;

(iii) inspection and testing standards;

(iv) *Metering Provider* accreditation standards;

(v) the technical requirements for the database of the *metering installation*; and

(vi) the technical standards for *metering* of a *market load* that is connected to a *network* where the operator or owner of that *network* is not a *Registered Participant*;

(3) provide information on the application of the *Rules*, subject to a statement in the procedure that where any inconsistency arises between the *Rules* and the *metrology procedure*, the *Rules* prevail to the extent of that inconsistency;

(4) in relation to type 5 and 6 *metering installations*, contain requirements:

(i) for the engagement and payment of *Metering Providers*; and

(ii) for the provision of relevant details of the *metering installation* to the *responsible person*, where applicable;

(5) in relation to type 5, 6 and 7 *metering installations* specify in what circumstances *energy data* held in *metering installations* within the relevant *participating jurisdiction*, can be used by *Distribution Network Service Providers* to calculate charges for *distribution services* for the purposes of clause 6.20.1(e); and

(6) contain information to ensure consistency in practice between the *metrology procedure* and other instruments developed and published by *AEMO*, including the practices adopted in the *Market Settlement and Transfer Solution Procedures*.

(b) The *metrology procedure* may not include information relating to consumer protection.

7.14.4 Amendment of the metrology procedure

(a) Any person ('the **proponent**') may submit to *AEMO* a proposal to amend the *metrology procedure* except in relation to the *jurisdictional metrology material* ('the **proposal**'), and must include reasons for the proposed change.

(b) For proposals submitted under paragraph (a), *AEMO* must:

(1) give notice of receipt of the proposal to the proponent; and

(2) advise the proponent of the action that *AEMO* proposes to undertake under paragraphs (c) or (e).

(c) Where *AEMO*:

(1) accepts the proposal, *AEMO* must conduct the *Rules consultation procedures* in relation to that proposal;

(2) requests further information from the proponent in relation to a proposal, on receiving that information *AEMO* must either accept, or reject the proposal; or

(3) rejects a proposal, *AEMO* must advise the proponent of its decision and reasons for the decision in writing.

(d) *AEMO* may at the conclusion of the *Rules consultation procedures* amend the *metrology procedure* (if necessary).

(e) Where in *AEMO's* reasonable opinion, a proposal referred to in paragraph (a) relates to amendments that are of a minor or administrative nature, *AEMO* is not required to undertake the *Rules consultation procedures* but must:

(1) *publish* the proposal including the accompanying reasons;

(2) issue a notice to *Registered Participants*, *Metering Providers*, *Ministers* and the *AER* advising that the amendment to the *metrology procedure* has been *published*;

(3) invite submissions on the proposal;

(4) allow 10 *business days* for the receipt of submissions;

(5) allow a reasonable extension of time for submissions if requested in writing by a *Registered Participant* or *Metering Provider*;

(6) *publish* submissions as soon as practicable after submissions have been received;

(7) consider the submissions; and

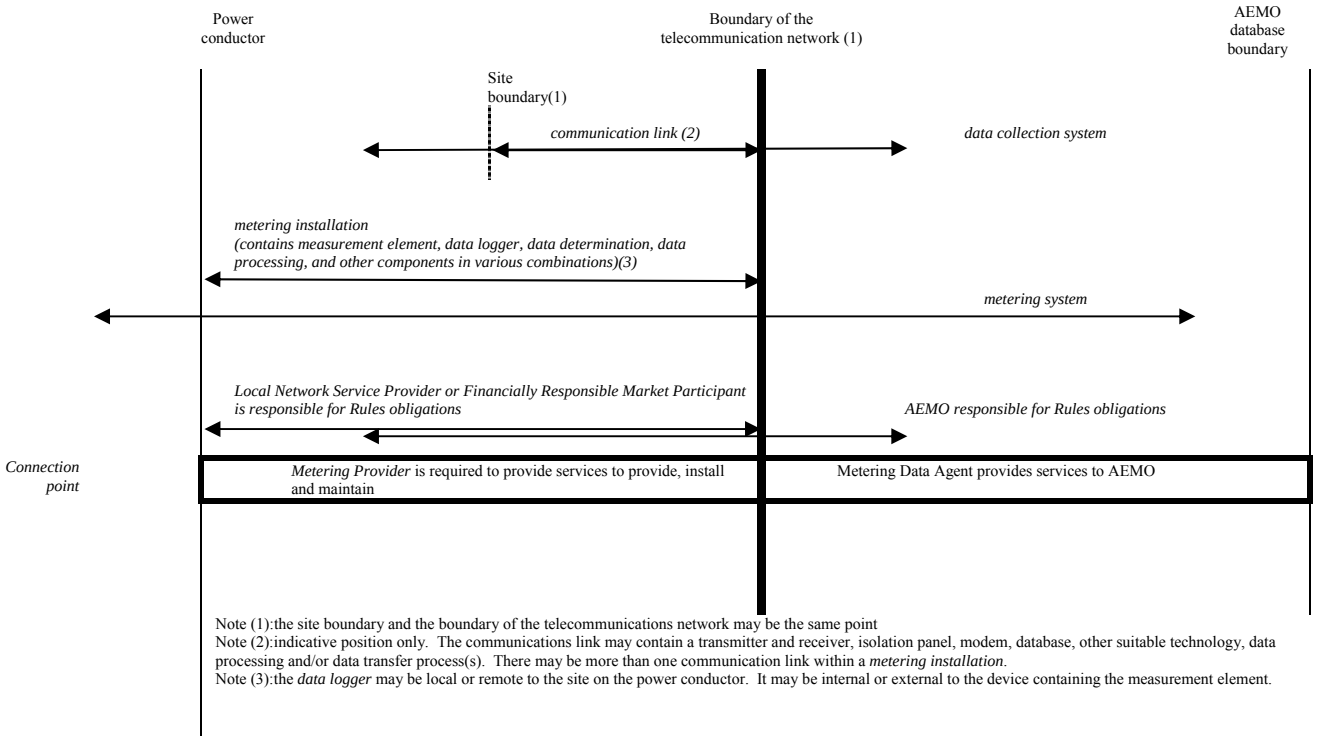
(8) *publish*, on or before the day of *publication* of the *metrology procedure*, reasons for the amendments to the *metrology procedure*.

7.15 Miscellaneous

(a) *AEMO* in consultation with the *National Measurement Institute* must establish guidelines that clarify the application of the requirements of the *National Measurement Act* to *metering installations*.

(b) For the avoidance of doubt, to the extent that there is an inconsistency between the *Rules* and the *National Measurement Act*, the Act prevails to the extent of that inconsistency.

Schedule 7.1 - Responsibility for Metering



Note (1):the site boundary and the boundary of the telecommunications network may be the same point
Note (2):indicative position only. The communications link may contain a transmitter and receiver, isolation panel, modem, database, other suitable technology, data processing and/or data transfer process(s). There may be more than one communication link within a *metering installation*.
Note (3):the *data logger* may be local or remote to the site on the power conductor. It may be internal or external to the device containing the measurement element.

Schedule 7.2 - Types and Accuracy of Metering Installations

S7.2.1 General requirements

(a) The following are the minimum requirements for *metering installations*.

(b) A *Registered Participant* may install a *metering installation* with a higher level of accuracy, with the full costs of this work being met by that *Registered Participant*.

S7.2.2 Metering installations commissioned prior to 13 December 1998

(aa) This clause provides conditions that are to apply to *metering installations* that were commissioned prior to 13 December 1998.

(a) The use of *metering* class *current transformers* and *voltage transformers* that are not in accordance with Table S7.2.3.1 are permitted provided that where necessary to achieve the overall accuracy requirements:

(1) *meters* of a higher class accuracy are installed; and/or

(2) calibration factors are applied within the *meter* to compensate for *current transformer* and *voltage transformer* errors.

(b) Protection *current transformers* are acceptable where there are no suitable *metering* class *current transformers* available and the overall accuracy and performance levels can be met.

(c) Where the requirements of clauses S7.2.2(a) and S7.2.2(b) cannot be achieved then the *responsible person* is required to comply with transitional arrangements or obtain an exemption from *NEMMCO* or upgrade the *metering installation* to comply with this schedule 7.2.

(d) The arrangements referred to in clause S7.2.2(c) may remain in force while the required accuracy and performance can be maintained within the requirements of the *Rules*.

(e) The purchase of new *current transformers* and *voltage transformers* must comply with the *Rules*.

S7.2.3 Accuracy requirements for metering installations

Table S7.2.3.1 Overall Accuracy Requirements of Metering Installation Components (Item 1)

Type	Volume limit per annum per connection point	Maximum allowable overall error (±%) (refer Tables 2 - 6) at full load		Minimum acceptable class or standard of components	Metering installation or data logger Clock Error (Seconds) in reference to EST
		active	reactive		
1	greater than 1000 GWh	0.5	1.0	0.2 CT/VT/Meter Wh 0.5 Meter varh	±5
2	100 to – 1000 GWh	1.0	2.0	0.5 CT/VT/ Meter Wh 1.0 Meter varh	±7
3	0.75 to less than 100 GWh	1.5	3.0	0.5 CT/VT 1.0 Meter Wh 2.0 Meter varh	±10
4	less than 750 MWh (Item 2)	1.5	n/a	Either 0.5 CT and 1.0 Meter Wh; or whole current connected *General Purpose meter MWh:* • with a *data logger*; and • meets the requirements of clauses 7.11.1(a) and (b) or 7.11.1(a) or (c).	±20 (Item 2a)
5	Less than x MWh (Item 3)	1.5 (Item 3b)	n/a	Either 0.5CT and 1.0 *meter* Wh; or whole current connected *General Purpose meter* Wh; • with a *data logger;* and • meets the requirements of clause 7.11.1(d)	±20 (Item 3a)

Type	Volume limit per annum per connection point	Maximum allowable overall error (±%) (refer Tables 2 - 6) at full load		Minimum acceptable class or standard of components	Metering installation or data logger Clock Error (Seconds) in reference to EST
		active	reactive		
6	Less than y MWh (Item 4)	2.0 (Item 4b)	n/a	CT or whole-current connected *General Purpose meter* Wh with data processing used to convert *accumulated energy data* into *metering data* and to provide *estimated energy data* where necessary.	(Item 4a)
7	Volume limit not specified (Item 5)	(Item 6)	n/a	No *meter* Techniques for determination of *estimated energy data* to be included in the *metrology procedure.*	n/a

Item 1: (a) For a type 3, 4, 5 and 6 *metering installation*, direct connected *meters* may be used if the *meters* meet the requirements of the relevant *Australian Standards* and International Standards which must be identified in the *metrology procedure*.

(b) The *metering installation* types referred to in paragraph (a) must comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

Item 2: *High Voltage* customers that require a *VT* and whose annual consumption is below 750MWh, must meet the relevant accuracy requirements of Type 3 *metering* for *active energy* only.

Item 2a: For the purpose of clarification, the clock for a type 4 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving whole-current technologies that are acceptable in accordance with rule 7.13(a).

Item 3: The following requirements apply in relation to a type 5 *metering installation*:

(1) the installation must comply with the *metrology procedure* when converting *active energy* into *metering data*;

(2) the value of "x" must be determined by each *Minister of a participating jurisdiction* and must be provided to *AEMO* for inclusion in the *metrology procedure*;

(3) the maximum acceptable value of "x" determined under subparagraph (2) must be 750 MWh per annum;

(4) the installation may provide delays in transferring the *interval energy data* to a remote location where access to a *telecommunications network* has been established;

(5) delays under subparagraph (4) must be approved by the relevant *Minister of the participating jurisdiction* and the approval provided to *AEMO* for inclusion in the *metrology procedure*; and

(6) the *metrology procedure* must record the value of "x" for each *participating jurisdiction*, and indicate how *interval energy data* will be established for a type 5 *metering installation* in that *participating jurisdiction* during the period of delay.

Item 3a: For the purpose of clarification, the clock error for a type 5 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving whole-current technologies that are acceptable in accordance with rule 7.13(a).

Item 3b: The maximum allowable error of a type 5 *metering installation* may be relaxed in the *metrology procedure* to accommodate evolving technologies providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.

Item 4: The following requirements apply in relation to a type 6 *metering installation*:

(1) a *metrology procedure* must include a procedure relating to converting *active energy* into *metering data*;

(2) the value of "y" must be determined by each *Minister of a participating jurisdiction* and be provided to *AEMO* for inclusion in the *metrology procedure*;

(3) the maximum acceptable value of "y" determined under subparagraph (2) must be 750 MWh per annum;

(4) *accumulated energy data* can be transferred to a remote location where access to a *telecommunication network* has been established;

(5) the *metrology procedure* must:

(i) record the value of "y" for each *participating jurisdiction*;

(ii) identify the method by which *accumulated energy data* is to be converted into *trading interval* data in accordance with clause 7.9.3(b), and

(iii) the method by which *estimated energy data* is to be prepared during the period when the *accumulated energy data* is not available; and

(6) devices within the installation may provide *accumulated energy data* in pre-determined daily time periods where such time periods are contained in the *metrology procedure*.

Item 4a: Any relevant clock errors for a type 6 *metering installation* are to be established in the *metrology procedure*.

Item 4b: The maximum allowable error of a type 6 *metering installation* may be relaxed in the *metrology procedure* providing that such relaxation is consistent with any regulations published under the *National Measurement Act*.

Item 5: (a) A type 7 *metering installation* classification applies where a *metering installation* does not require a *meter* to measure the flow of electricity in a power conductor and accordingly there is a requirement to determine by other means the *energy data* that is deemed to flow in the power conductor.

(b) The condition referred to in paragraph (a) will only be allowed for *connection points* where *AEMO* in consultation with the *Local Network Service Provider* determines:

(1) the load pattern is predictable;

(2) for the purposes of *settlements*, the load pattern can be reasonably calculated by a relevant method set out in the *metrology procedure*; and

(3) it would not be cost effective to meter the *connection point* taking into account:

(i) the small magnitude of the *load*;

(ii) the *connection* arrangements; and

(iii) the geographical and physical location.

(c) The *metrology procedure* must include arrangements for type 7 *metering installations* that have been classified as *market loads*.

(d) A *connection point* that meets the condition for classification as a type 7 *metering installation* does not limit that *connection point* from being metered in the future.

Item 6: The accuracy of the calculated *energy data* is to be in accordance with approved techniques for determining the flow of electricity in power conductors. The techniques, including algorithms, are to be included in the *metrology procedure*.

Table S7.2.3.2Type 1 Installation – Annual Energy Throughput greater than 1,000 GWh

% Rated Load	**Power Factor**					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	1.0%	1.0%	2.0%	n/a	n/a	1.4%
50	0.5%	0.5%	1.0%	0.7%	1.4%	1.0%
100	0.5%	0.5%	1.0%	n/a	n/a	1.0%

Table S7.2.3.3Type 2 Installation – Annual Energy Throughput between 100 and 1,000 GWh

% Rated Load	**Power Factor**					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.0%	2.0%	4.0%	n/a	n/a	2.8%
50	1.0%	1.0%	2.0%	1.5%	3.0%	2.0%
100	1.0%	1.0%	2.0%	n/a	n/a	2.0%

Table S7.2.3.4Type 3 Installation – Annual Energy Throughput from 0.75 GWh to less than 100 GWh

% Rated Load	**Power Factor**					
	Unity	0.866 lagging		0.5 lagging		Zero
	active	active	reactive	active	reactive	reactive
10	2.5%	2.5%	5.0%	n/a	n/a	4.0%

50	1.5%	1.5%	3.0%	2.5%	5.0%	3.0%
100	1.5%	1.5%	3.0%	n/a	n/a	3.0%

Table S7.2.3.5Type 4 or 5 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	**Power Factor**		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	2.5%	2.5%	n/a
50	1.5%	1.5%	2.5%
100	1.5%	1.5%	n/a

Table S7.2.3.6Type 6 Installation – Annual Energy Throughput less than 0.75 GWh

% Rated Load	**Power Factor**		
	Unity	0.866 lagging	0.5 lagging
	active	active	active
10	3.0%	n/a	n/a
50	2.0%	n/a	3.0%
100	2.0%	n/a	n/a

(NOTE: All measurements in Tables S7.2.3.2 – S7.2.3.6 are to be referred to 25 degrees Celsius).

(a) The method for calculating the overall error is the vector sum of the errors of each component part (that is, a + b + c) where:

a = the error of the *voltage transformer* and wiring;

b = the error of the *current transformer* and wiring; and

c = the error of the *meter*.

(b) If compensation is carried out then the resultant *metering system* error shall be as close as practicable to zero.

S7.2.4. Check metering

(a) *Check metering* is to be applied in accordance with the following Table:

Type	Energy (GWh pa) per metering point	Check Metering Requirements
1	greater than 1000	*Check metering installation*
2	100 to 1000	Partial *check metering*
3	0.75 to less than 100	No requirement
4, 5 and 6	Less than 0.75	No requirement

(b) A *check metering installation* involves either:

(1) the provision of a separate *metering installation* using separate *current transformer* cores and separately fused *voltage transformer* secondary circuits, preferably from separate secondary windings: or

(2) if in *AEMO's* absolute discretion it is considered appropriate, in the case of a *metering installation* located at the facility at one end of the *two-terminal link,* a *metering installation* located at the *facility* at the other end of a *two-terminal link*.

(c) Where the *check metering installation* duplicates the *revenue metering installation* and accuracy level, the average of the two validated data sets will be used to determine the *energy* measurement.

(d) Partial *check metering* involves the use of other *metering data* or operational data available to *AEMO* in 30 min electronic format as part of a validation process in accordance with clause 7.9.4.

(e) The physical arrangement of partial *check metering* shall be agreed between the *responsible person* and *AEMO*.

(f) *Check metering installations* may be supplied from secondary circuits used for other purposes and may have a lower level of accuracy than the *revenue metering installation*, but must not exceed twice the level prescribed for the *revenue metering installation*.

S7.2.5. Resolution and accuracy of displayed or captured data

Programmable settings available within a *metering installation*, *data logger* or any peripheral device, which may affect the resolution of displayed or stored data, must:

(a) meet the requirements of the relevant *Australian Standards* and International Standards which must be identified in the *metrology procedure*; and

(b) comply with any applicable specifications or guidelines (including any transitional arrangements) specified by the National Measurement Institute under the *National Measurement Act*.

S7.2.6. General design standards

S7.2.6.1 Design requirements

Without limiting the scope of detailed design, the following requirements must be incorporated in the design of each *metering installation*:

(a) For *metering installations* greater than 1000 GWh pa per *metering point*, the *current transformer* core and secondary wiring associated with the *revenue meter* shall not be used for any other purpose unless otherwise agreed by *AEMO*.

(b) For *metering installations* less than 1000 GWh pa per *metering point* the *current transformer* core and secondary wiring associated with the *revenue meter* may be used for other purposes (e.g. local *metering* or protection) provided the *responsible person* demonstrates to the satisfaction of *AEMO* that the accuracy of the *metering installation* is not compromised and suitable procedures/measures are in place to protect the security of the *metering installation.*

(c) Where a *voltage transformer* is required, if separate secondary windings are not provided, then the *voltage* supply to each *metering installation* must be separately fused and located in an accessible position as near as practical to the *voltage transformer* secondary winding.

(d) Secondary wiring must be by the most direct route and the number of terminations and links must be kept to a minimum.

(e) The incidence and magnitude of burden changes on any secondary winding supplying the *metering installation* must be kept to a minimum.

(f) *Meters* must:

(1) meet the requirements of relevant *Australian Standards* and International Standards which must be identified in the *metrology procedure*; and

(2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.

(g) New *instrument transformers* must:

(1) meet the requirements of relevant *Australian Standards* and International Standards which must be identified in the *metrology procedure*; and

(2) have a valid pattern approval issued under the authority of the National Measurement Institute or, until relevant pattern approvals exist, a valid type test certificate.

(h) Suitable *isolation* facilities are to be provided to facilitate testing and calibration of the *metering installation*.

(i) Suitable drawings and supporting information, detailing the *metering installation*, must be available for maintenance and auditing purposes.

S7.2.6.2 Design guidelines

In addition to the above Design Requirements, the following guidelines should be considered for each *metering installation*:

(a) The provision of separate secondary windings for each *metering installation* where a *voltage transformer* is required.

(b) A *voltage* changeover scheme where more than one *voltage transformer* is available.

Schedule 7.3 - Inspection and Testing Requirements

S7.3.1. General

(a) The *responsible person* must ensure that equipment comprised in a purchased *metering installation* has been tested to the required class accuracy with less than the uncertainties set out in Table S7.3.1.

(b) The *responsible person* must ensure appropriate test certificates of the tests referred to in paragraph (a) are retained.

(c) The *responsible person* (or any other person arranging for testing) must ensure that testing of the *metering installation* is carried out:

(1) in accordance with clause 7.6.1 and this schedule 7.3; or

(2) in accordance with an asset management strategy that defines an alternative testing practice (other than time-based) determined by the *responsible person* and approved by *AEMO*,

and:

(3) in accordance with a test plan which has been registered with *AEMO*;

(4) to the same requirements as for new equipment where equipment is to be recycled for use in another site; and

(5) so as to include all data storage and processing components included in the *metrology procedure,* including algorithms used to prepare agreed load patterns.

(d) *AEMO* must review the prescribed testing requirements in this schedule 7.3 every 5 years in accordance with equipment performance and industry standards.

(e) The testing intervals may be increased if the equipment type/experience proves favourable.

(f) The maximum allowable level of testing uncertainty (±) for all *metering* equipment must be in accordance with Table S7.3.1.

Table S7.3.1Maximum Allowable Level of Testing Uncertainty (±)

Description	**Metering Equipment Class**				
	Class 0.2	**Class 0.5**	**Class 1.0**	**General Purpose**	**Class 2.0**

		Metering Equipment Class				
In Laboratory	CTs ratio phase	0.05% 0.07 crad	0.1% 0.15 crad	n/a	n/a	n/a
	VTs ratio Phase	0.05% 0.05 crad	0.1% 0.1 crad	n/a	n/a	n/a
	Meters Wh	0.05/cosϕ%	0.1/cosϕ%	0.2/cosϕ%	0.2/cosϕ%	n/a
	Meters varh	n/a	0.2/sinϕ%	0.3/sinϕ%	n/a	0.4/sinϕ%
In Field	CTs ratio Phase	0.1% 0.15 crad	0.2% 0.3 crad	n/a	n/a	n/a
	VTs ratio Phase	0.1% 0.1 crad	0.2% 0.2 crad	n/a	n/a	n/a
	Meters Wh	0.1/cosϕ%	0.2/cosϕ%	0.3/cosϕ%	0.3/cosϕ%	n/a
	Meters varh	n/a	0.3/sinϕ%	0.4/sinϕ%	n/a	0.5/sinϕ%

Where cosϕ is the power factor at the test point under evaluation.

Table S7.3.2Maximum Period Between Tests

Unless the *responsible person* has developed an asset management strategy that defines practices that meet the intent of this schedule 7.3 and is approved by *AEMO*, the maximum period between tests must be in accordance with this Table S7.3.2.

Description	Metering Installation Type				
	Type 1	Type 2	Type 3	Type 4	Types 5 & 6
CT	10 years	10 years	10 years	10 years	10 years
VT	10 years	10 years	10 years		n/a
Burden tests	When *meters* are tested or when changes are made				
CT connected Meter (electronic)	5 years	5 years	5 years	5 years	5 years
CT connected Meter (induction)	2.5 years	2.5 years	5 years	5 years	5 years

Whole-current (Direct Connected Meter)	The testing and inspection requirements must be in accordance with an asset management strategy. Guidelines for the development of the asset management strategy must be recorded in the *metrology procedure*.

Table S7.3.3Period Between Inspections

Unless the *responsible person* has developed an asset management strategy that meets the intent of this schedule 7.3 and is approved by *AEMO*, the period between inspections must be in accordance with this Table S7.3.3.

Description	**Metering Installation Type**			
	Type 1	Type 2	Type 3	Type 4, 5 & 6
Metering installation equipment inspection	2.5 years Note: increased inspection period allowed because of *check metering installation* requirements.	12 months (2.5 years if *check metering* installed)	> 10 GWh: 2 years 2≤ ≤10 GWh: 3 years <2 GWh: when meter is tested.	When meter is tested.

S7.3.2. Technical Guidelines

(a) *Current transformer* and *voltage transformer* tests are primary injection tests or other testing procedures as approved by *AEMO*.

(b) The calculations of accuracy based on test results are to include all reference standard errors.

(c) An "estimate of testing uncertainties" must be calculated in accordance with the ISO "Guide to the Expression of Uncertainty for Measurement".

(d) Where operational *metering* is associated with *settlements metering* then a shorter period between inspections is recommended.

(e) For sinϕ and cosϕ refer to the ISO "Guide to the Expression of Uncertainty in Measurement", where cosϕ is the *power factor*.

(f) A typical inspection may include:

(1) check the seals;

(2) compare the pulse counts;

(3) compare the direct readings of *meters*;

(4) verify *meter* parameters and physical connections; and

(5) *current transformer* ratios by comparison.

Schedule 7.4 - Metering Provider

S7.4.1 General

(a) A *Metering Provider* must be accredited by and registered by *AEMO*. *AEMO* must accredit and register a *Metering Provider* only for the type of work the *Metering Provider* is qualified to provide.

(b) *AEMO* must establish a qualification process for *Metering Providers* that enables registration to be achieved in accordance with the requirements of this schedule 7.4.

(c) **[Deleted]**

(d) A *Metering Provider* must have the necessary licenses in accordance with appropriate State and Territory requirements.

(e) A *Metering Provider* must ensure that any *metering* equipment it installs is suitable for the range of operating conditions to which it will be exposed (e.g. temperature; impulse levels), and operates within the defined limits for that equipment.

(f) A *Metering Provider* must ensure that the *metering installation* is installed and maintained in accordance with the *metrology procedure*.

S7.4.2 Categories of registration

(a) Registrations, in relation to *metering installation* types 1, 2, 3 and 4, must be categorised in accordance with Tables S7.4.1, S7.4.2 and S7.4.3 or other procedures approved by *AEMO*.

(b) In relation to *metering installation* types 5, 6 and 7, *AEMO* must establish categories of registration which are consistent with the service requirements established in the *metrology procedure*.

(c) *AEMO* may establish *Accredited Service Provider categories* of registration for a *Metering Provider* in accordance with clause S7.4.5.

Table S7.4.1Categories of registration for accreditation

Category	Competency
1C	Class 0.2 CTs with < 0.1% uncertainty.
1V	Class 0.2 VTs with < 0.1% uncertainty.
1M	Class 0.2 Wh meters with < 0.1/cosö% uncertainty and class 0.5 varh meters with <0.3/sinϕ% uncertainty.
1A	Class 0.2 CTs, VTs, Wh meters; class 0.5 varh meters; the total installation to 0.5%.

Category	Competency
	Wh with < 0.2% uncertainty at unity *power factor*; 1.0% for varh with <0.4% uncertainty at zero *power factor*.
2C	Class 0.5 CTs with < 0.2% uncertainty.
2V	Class 0.5 VTs with < 0.2% uncertainty.
2M	Class 0.5 Wh meters with < 0.2/cosϕ% uncertainty and class 1.0 varh meters with <0.4/sinϕ% uncertainty.
2A	Class 0.5 CTs, VTs, Wh meters; class 1.0 varh meters; the total installation to 1.0%. Wh with < 0.4% uncertainty at unity *power factor*; 2.0% for varh with <0.5% uncertainty at zero *power factor*.

Table S7.4.2Categories of registration for accreditation

Category	Competency
3M	Class 1.0 Wh meters with < 0.3/cosϕ% uncertainty and class 2.0 varh meters with <0.5/sinϕ% uncertainty.
3A	Class 0.5 CTs, VTs; class 1.0 Wh meters; class 2.0% varh meters; the total installation to 1.5%. Wh with < 0.5% uncertainty at unity *power factor*; 3.0% for varh with <0.6% uncertainty at zero *power factor*.
4M	Class 1.0 Wh meters and class 1.5 Wh meters with <0.3/cosϕ% uncertainty

Table S7.4.3Categories of registration for accreditation

Category	Competency
L	Approved Communication Link Installer

S7.4.3 Capabilities of Metering Providers for metering installations types 1, 2, 3 and 4

Category 1A, 2A, 3A and 4M *Metering Providers* must be able to exhibit the following capabilities to the reasonable satisfaction of *AEMO*:

(a) Detailed design and specification of *metering* schemes, including:

(1) knowledge and understanding of this Chapter 7;

(2) knowledge of equipment (*meters*, *current transformers* and where applicable *voltage transformers*);

(3) design experience including knowledge of *current transformers* and where applicable *voltage transformers* and the effect of burdens on performance;

(4) ability to calculate summation scheme values, multipliers, etc; and

(5) ability to produce documentation, such as single line diagrams, panel layouts and wiring diagrams.

(b) Programming and certification requirements for *metering installations* to the required accuracy, including:

(1) licensed access to *metering* software applicable to all equipment being installed by the *Metering Provider*;

(2) ability to program requirements by setting variables in *meters*, summators, modems, etc;

(3) management of the testing of all equipment to the accuracy requirements specified in this Chapter 7;

(4) certifications that all calibration and other *meter* parameters have been set, verified and recorded prior to *meters*, *data loggers*, etc., being released for installation;

(5) all reference/calibration equipment for the purpose of meeting test or inspection obligations must be tested to ensure full traceability to test certificates issued by a *NATA* accredited body or a body recognised by *NATA* under the International Laboratory Accreditation Corporation ('**ILAC**') mutual recognition scheme and documentation of the traceability must be provided to *AEMO* on request; and

(6) compliance with ISO/IEC Guide 25 "General Requirements for the Competence of Calibration and Testing Laboratories" with regard to the calculation of uncertainties and accuracy.

(c) Installation and commissioning of *metering installations* including the remote accessing of data, including:

(1) the use of calibrated test equipment to perform primary injection tests and field accuracy tests;

(2) the availability of trained and competent staff to install and test *metering installations* to determine that installation is correct; and

(3) the use of test procedures to confirm that the *metering installation* is correct and that *metering* constants are recorded and/or programmed correctly.

(d) Inspection and maintenance of *metering installations* and equipment, including:

(1) regular readings of the measurement device where external *data loggers* or recorders to be used (6 monthly) and verification with *AEMO* records;

(2) approved test and inspection procedures to perform appropriate tests as detailed in this Chapter 7;

(3) calibrated field test equipment for primary injection and *meter* testing to the required levels of uncertainty; and

(4) secure documentation system to maintain *metering* records for all work performed on a *metering installation*, including details of the security method used.

(e) Verification of *revenue metering data* and *check metering data*, as follows:

(1) on commissioning *metering data*, verification of all readings, constraints (adjustments) and multipliers to be used for converting raw data to consumption data; and

(2) on inspection, testing and/or maintenance, verification that readings, constants and multipliers are correct by direct conversion of *meter readings* and check against the *metering database*.

(f) Quality System as AS 9000 series standards, including:

(1) a quality system to AS/NZ ISO 9000 series applicable to the work to be performed:

Type 1	-	full implementation of AS/NZ ISO 9002;
Type 2	-	full implementation of AS/NZ ISO 9002;
Type 3	-	implementation of AS/NZ ISO 9002 to a level agreed with *AEMO*;
Type 4	-	implementation of AS/NZ ISO 9002 to a level agreed with *AEMO*;

(2) the calculations of accuracy based on test results are to include all reference standard errors;

(3) an estimate of Testing Uncertainties which must be calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement"; and

(4) a knowledge and understanding of the appropriate standards and guides, including those in the *Rules*.

S7.4.4 Capabilities of Metering Providers for metering installations types 5, 6 and 7

Metering Providers, who apply for categories of *Metering Provider* accreditation of *metering installations* types 5, 6 and / or 7, must be able to exhibit, to the reasonable satisfaction of *AEMO*:

(a) all of the capabilities relevant to that type of *metering installation* which are included in clause S7.4.3;

(b) any relevant capabilities required for data processing specified in the *metrology procedure*; and

(a) an acceptable standard of performance, determined by reference to the *metrology procedure*, for each of the processes and devices identified in the *metrology procedure*.

S7.4.5 Capabilities of the Accredited Service Provider category

(a) The *Accredited Service Providers categories* established by *AEMO* under clause S7.4.2(c) may perform work relating to the installation of any types 1, 2, 3, 4, 5 or 6 *metering installations*.

(b) *AEMO* must include *Accredited Service Provider categories* in the accreditation guidelines prepared and *published* under clause 7.4.2(ba).

(c) *AEMO* may determine:

(1) the competencies of a *Metering Provider* registered in each *Accredited Service Provider category* provided that those competencies are consistent with any service requirements established in the *metrology procedure* in respect of the work performed under paragraph (a); and

(2) different competencies for each *Accredited Service Provider category* for each *participating jurisdiction*.

Schedule 7.5 - Metering Register

S7.5.1. General

(a) The *metering register* forms part of the *metering database* and holds static *metering* information associated with *metering installations* defined by the *Rules* that determines the validity and accuracy of *metering data*.

(b) The purpose of the *metering register* is to facilitate:

(1) the registration of *connection points*, *metering points* and affected *Registered Participants*;

(2) the verification of compliance with the *Rules*; and

(3) the auditable control of changes to the registered information.

(c) The data in the *metering register* is to be regarded as confidential and would only be released to the appropriate party in accordance with rule 7.7.

S7.5.2. Metering register information

Metering information to be contained in the *metering register* should include, but is not limited to the following:

(a) *Connection* and *metering point* reference details, including:

(1) agreed locations and reference details (eg drawing numbers);

(2) loss compensation calculation details;

(3) site identification names;

(4) details of *Market Participants* and *Local Network Service Providers* associated with the *connection point*;

(5) nomination of the *responsible person*; and

(6) transfer date for *Second-Tier Customer* and *Non-Registered Second-Tier Customer metering data* (i.e. to another *Market Customer*).

(b) The identity and characteristics of *metering* equipment (ie *instrument transformers*, *revenue metering installation* and *check metering installation*), including:

(1) serial numbers;

(2) *metering installation* identification name;

(3) *metering installation* types and models;

(4) *instrument transformer* ratios (available and connected);

(5) current test and calibration programme details, test results and references to test certificates;

(6) asset management plan and testing schedule;

(7) calibration tables, where applied to achieve *metering installation* accuracy;

(8) *Metering Provider(s)* details;

(9) summation scheme values and multipliers; and

(10) data register coding details.

(c) Data communication details, including:

(1) telephone number(s) for access to data;

(2) communication equipment type and serial numbers;

(3) communication protocol details or references;

(4) data conversion details;

(5) user identifications and access rights; and

(6) 'write' password (to be contained in a hidden or protected field).

(d) Data validation, substitution and estimation processes agreed between affected parties, including:

(1) algorithms;

(2) data comparison techniques;

(3) processing and alarms (eg *voltage* source limits; phase-angle limits);

(4) *check metering* compensation details; and

(5) alternate data sources.

(e) Data processing prior to the *settlement* process, including algorithms for:

(1) *generation* half-hourly 'sent-out' calculation;

(2) customer half-hourly *load* calculation; and

(3) *Local Retailer* net *load* calculation.

CHAPTER 8

8. Administrative Functions

8.1 Administrative functions

8.1.1 [Deleted]

8.1.2 [Deleted]

Part A Introductory

8.1.3 Structure of this Chapter

(a) This Chapter describes some of the key processes and obligations associated with the administration of the *Rules* and deals also with *augmentations*.

(b) It is divided into Parts as follows:

(1) this Part is introductory;

(2) Part B deals with dispute resolution;

(3) Part C deals with the obligations of *Registered Participants* to maintain confidentiality;

(4) Part D deals with monitoring and reporting;

(5) Part E deals with the structure and responsibilities of the *Reliability Panel*;

(6) Part F sets out the *Rules consultation procedures*;

(7) Part G deals with funding for the Consumer Advocacy Panel;

(8) Part H deals with *augmentations*.

(c) **[Deleted]**

(d) **[Deleted]**

(e) **[Deleted]**

(f) **[Deleted]**

(g) **[Deleted]**

Part B Disputes

8.2 Dispute Resolution

8.2.1 Application and guiding principles

(a) This rule 8.2 applies to any dispute which may arise between two or more *Registered Participants* about:

(1) the application or interpretation of the *Rules*;

(2) the failure of any *Registered Participants* to reach agreement on a matter where the *Rules* require agreement or require the *Registered Participants* to negotiate in good faith with a view to reaching agreement;

(3) **[Deleted]**

(4) the proposed access arrangements or *connection agreements* of an *Intending Participant* or a *Connection Applicant*;

(5) the payment of moneys under or concerning any obligation under the *Rules*;

(6) any other matter relating to or arising out of the *Rules* to which a contract between two or more *Registered Participants* provides that the dispute resolution procedures under the *Rules* are to apply;

(7) any other matter relating to or arising out of the *Rules* in respect of which two or more *Registered Participants* have agreed in writing that this rule 8.2 should apply; or

(8) any other matter that the *Rules* provide may or must be dealt with under this rule 8.2,

but does not apply to those disputes described in clause 8.2.1(h).

(a1) For the purposes of this rule 8.2 only, "*Registered Participant*" is deemed to include not just *Registered Participants* but also *AEMO* and *Connection Applicants* who are not otherwise *Registered Participants*, except that this will not be the case where the term "Registered Participant":

(1) is used in clauses 8.2.2(b)(4), 8.2.2(d), 8.2.3(a), 8.2.3(b)(5) and 8.2.5(e);

(2) first occurs in clauses 8.2.3(b), (b)(3), (b)(4) or (c); or

(3) last occurs in clauses 8.2.4(a) or 8.2.9(c).

(b) **[Deleted]**

(c) **[Deleted]**

(d) The dispute resolution regime in this rule 8.2 provides procedures to resolve disputes between parties, not sanctions for breach of the *Rules*. The dispute resolution processes may indicate that a breach of the *Rules* has occurred and the resolution or determination of the dispute may take account of the damage thereby caused to a party. Any action for breach of the *Rules* may only be taken by the *AER* acting in accordance with the *National Electricity Law*.

(e) It is intended that the dispute resolution regime set out in or implemented in compliance with the *Rules* and described in detail in this rule 8.2 should to the extent possible:

(1) be guided by the *national electricity objective*;

(2) be simple, quick and inexpensive;

(3) preserve or enhance the relationship between the parties to the dispute;

(4) take account of the skills and knowledge that are required for the relevant procedure;

(5) observe the rules of natural justice;

(6) place emphasis on conflict avoidance; and

(7) encourage resolution of disputes without formal legal representation or reliance on legal procedures.

(f) Except as provided in the *National Electricity Law* and clause 8.2.1(g), where any dispute of a kind set out in clause 8.2.1(a) arises, the parties concerned must comply with the procedures set out in clauses 8.2.4 to 8.2.10 and 8.2.12 and, where the dispute is referred to a *DRP*, a determination of the *DRP* is final and binding on the parties.

(g) Notwithstanding clause 8.2.1(f), a party may seek an urgent interlocutory injunction from a court of competent jurisdiction.

(h) Rule 8.2 does not apply to:

(1) a decision by *AEMO* regarding an exemption under clause 2.2.1(c);

(2) a decision by *AEMO* under clause 2.2.2 not to approve the classification of a *generating unit* as a *scheduled generating unit*;

(3) a decision by *AEMO* under clause 2.2.3 not to approve the classification of a *generating unit* as a *non-scheduled generating unit*;

(4) a decision by *AEMO* under clause 2.9.2(c);

(5) a decision by *AEMO* to reject a notice from a *Market Customer* under clause 2.10.1(d);

(5A) a decision by *AEMO* with regard to the preparation or publication of a budget;

(5B) the formulation by AEMO of its revenue methodology or an amendment to its revenue methodology;

(6) a determination by *AEMO* under clause 3.3.8 of the *maximum credit limit* for a *Market Participant*;

(7) a decision by *AEMO* under clause 3.8.3 to refuse an application for aggregation;

(8) a decision by *AEMO* under clause 3.15.11 to reject a *reallocation request*;

(9) a decision by *AEMO* to issue a notice under clause 4.11.1(d);

(10) a decision by *AEMO* under clause 7.1.2(b) to refuse to permit a *Market Participant* to participate in the *market* in respect of a *connection point*;

(11) a decision by *AEMO* whether or not to deregister a *Metering Provider* under clause 7.4.3(a), (aa) or (b), to suspend a *Metering Provider* from a category of registration under clause 7.4.3(aa) or to impose agreed constraints on the continued operation of a *Metering Provider*;

(12) A dispute concerning the price of a *SRAS* agreement or a tender conducted by *AEMO* for the acquisition of *system restart ancillary services* under clause 3.11.5;

(13) a dispute of a kind referred to in clause 5.6.6A

(14) a *transmission services access dispute* to which Part K of Chapter 6A applies;

(15) a *distribution services access dispute* to which Part L of Chapter 6 applies; or

(16) a decision by *AEMO* under clause 2.2.7 not to approve the classification of a *semi-scheduled generating unit*.

8.2.2 The Dispute Resolution Adviser

(a) The *AER* must appoint a person or persons from time to time to perform the functions of the Dispute Resolution Adviser (the "*Adviser*"), on such terms and conditions as the *AER* may determine.

(b) The *Adviser* must:

(1) have a detailed understanding and experience of dispute resolution practice and procedures which do not involve litigation (alternative dispute resolution);

(2) have the capacity to determine the most appropriate alternative dispute resolution procedures in particular circumstances;

(3) have an understanding of the electricity industry or the capacity to quickly acquire such an understanding; and

(4) not be a *Registered Participant* or *AEMO* or be associated, directly or indirectly, with a *Registered Participant, AEMO* or the *AER*.

(c) The primary function of the *Adviser* is to attend to any matters necessary to ensure the effective operation of:

(1) the Stage 1 dispute resolution process set out in clause 8.2.4; and

(2) the Stage 2 dispute resolution process set out in clauses 8.2.5 and 8.2.6A to 8.2.6D.

(d) The *Adviser* must take reasonable steps to keep *Registered Participants* and *AEMO* informed, and in any case must report at least quarterly to *Registered Participants* and *AEMO*, about the operation of the dispute resolution processes established under the *Rules*.

(e) The *Adviser* must establish and maintain a pool of persons from which members of a *dispute resolution panel* ("*DRP*") may be selected in accordance with clause 8.2.6A.

(f) In selecting persons for the pool, the *Adviser* must have regard to:

(1) the need for members of a *DRP* to have an appropriate range of skills; and

(2) the need for persons in the pool to be drawn from all *participating jurisdictions*.

(g) The *Adviser* must review the composition of the pool at least every two years.

(h) The *Adviser* may issue guidance notes relating to:

(1) the form and content of a *dispute management system* ("*DMS*"); and

(2) the use and conduct of mediation in the Stage 1 dispute resolution process.

8.2.3 Dispute management systems of Registered Participants and AEMO

(a) Each *Registered Participant* and *AEMO* must adopt and implement a *DMS*.

(b) The *DMS* of a *Registered Participant* or *AEMO* must:

(1) be consistent with guidance notes of the *Adviser* relating to the form and content of a *DMS*;

(2) nominate a *DMS Contact* to be the first point of contact for the notification of disputes;

(3) provide that the *Registered Participant* or *AEMO* (as the case may be) must respond to a request for information (being information that is relevant to any of the matters set out in clause 8.2.1(a)) from another *Registered Participant* within 5 *business days* of receiving the request;

(4) set out the procedures of the *Registered Participant* or *AEMO* (as the case may be) for responding to requests for information from other *Registered Participants*; and

(5) set out any requirements and procedures necessary to ensure that the *Registered Participant* or *AEMO* (as the case may be) is able to comply with the requirements and time limits set out in clause 8.2.4.

(c) A *Registered Participant* or *AEMO* must provide a copy of its *DMS* upon being requested to do so by another *Registered Participant* or the *Adviser*.

8.2.4 Stage 1 - dispute resolution through Registered Participants' DMS

(a) A *Registered Participant* may activate the dispute resolution mechanisms in this clause by serving a *DMS referral notice* on the *DMS Contact* of one or more other *Registered Participants* or *AEMO* (as the case may be).

(b) Except where the *Rules* provides for another time period to apply, and subject to clause 8.2.4(k), a *DMS referral notice* must be served no later than 60 *business days* after the date on which the making of a disputed decision or the occurrence of disputed conduct could reasonably have become known to a *Registered Participant* affected by it.

(c) A *DMS referral notice*:

(1) must be in a form approved and *published* by the *Adviser*;

(2) must contain a statement setting out the circumstances giving rise to the dispute; and

(3) may request the person on whom it is to be served to provide information that is relevant to any of the matters set out in clause 8.2.1(a).

(d) Within 5 *business days* of service of a *DMS referral notice*, representatives of:

(1) the *Registered Participant* that served the notice; and

(2) every person on whom the notice was served,

must meet to determine, by agreement, the further conduct of the dispute.

(e) A meeting of *Registered Participants'* representatives:

(1) may be conducted in person, by telephone, video-conference or like method of real time communication;

(2) may agree that the dispute should be conducted by any consensual means, including by direct discussions between *Registered Participants* or by mediation; and

(3) must consider whether any other *Registered Participant* should be served with a *DMS referral notice*.

(f) Subject to clause 8.2.4(g), a meeting of *Registered Participants'* representatives may agree to keep confidential:

(1) the fact that a dispute exists between them; and

(2) any information exchanged between them for the purposes of attempting to resolve the dispute.

(g) *AEMO* must immediately notify the *Adviser* if:

(1) it serves a *DMS referral notice* on the *DMS Contact* of another *Registered Participant*, or

(2) it is served with a *DMS referral notice* by another *Registered Participant.*

The notification to the *Adviser* must include a list setting out each *Registered Participant* that *AEMO* considers may have an interest in the dispute, together with an indication as to whether *AEMO* has served a *DMS referral notice* in relation to the dispute on that *Registered Participant,* or has otherwise made the *Registered Participant* aware of the dispute.

(h) If *Registered Participants'* representatives, meeting in accordance with clauses 8.2.4(d) and (e), all agree that a *Registered Participant* that was not previously a party to the dispute should be served with a *DMS referral notice*, any one or more of them may serve a *DMS referral notice* on that other *Registered Participant*. Where a *Registered Participant* is served with such a notice, that *Registered Participant* must meet with the other parties to the dispute to determine the further conduct of the dispute in accordance with clauses 8.2.4(d), (e) and (f).

(i) If:

(1) a *Registered Participant* on whom a *DMS referral notice* is served does not agree to become a party to the dispute; or

(2) the dispute is not resolved within 20 *business days* (or such lesser period as is agreed by all the parties) after the day on which a *DMS referral notice* was last served on a *Registered Participant*,

any *Registered Participant* that has served a *DMS referral notice* in relation to the dispute or that has agreed to become a party to the dispute may, no later than 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, refer the matter to the *Adviser* in accordance with clause 8.2.5.

(j) If the dispute has not been referred to the *Adviser* within 60 *business days* after the day on which a *DMS referral notice* was last served on a *Registered Participant*, any obligations or requirements arising under this clause 8.2.4 in relation to that dispute cease to have effect.

(k) Despite clauses 8.2.4(b) and 8.2.4(i) and any other provision of the *Rules* that specifies a time limit for the raising of a dispute, where:

(1) a *DMS referral notice* has not been served within the period specified in clause 8.2.4(b);

(2) a dispute has not been referred to the *Adviser* within the time specified in clause 8.2.4(i); or

(3) any other dispute to which rule 8.2 applies has not been raised within the time limit specified in the *Rules* for the raising of such a dispute,

the dispute may be referred to the *Adviser,* and a *DRP* may determine the dispute if, in the opinion of the *DRP,* any prejudice suffered by any *Registered Participant* as a result of the dispute being referred outside the specified period would not, having regard to the circumstances giving rise to the failure to refer the dispute within the specified period, be unreasonable.

8.2.5 Stage 2 - dispute resolution process

(a) A dispute may be referred to the *Adviser* by serving on the *Adviser* an *Adviser referral notice* in accordance with this clause 8.2.5. An *Adviser referral notice* must:

(1) be in a form approved and published by the *Adviser*;

(2) contain the names of all the parties to the dispute; and

(3) if the *Registered Participant* serving the *Adviser referral notice* does not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1) and requires the *Adviser* to refer the dispute to a *DRP* for determination, must contain a statement to that effect.

(b) Where a dispute is referred to the *Adviser,* the *Adviser* must immediately notify each *Registered Participant* that is party to the dispute of that fact. Each *Registered Participant* must, within 5 *business days* of being so notified, provide to the *Adviser* a statement setting out:

(1) a brief history of the dispute and the circumstances giving rise to it; and

(2) a statement of its issues in relation to the dispute.

(c) The *Adviser* must, within 10 *business days* of being served with the *Adviser referral notice*, either:

(1) if the parties so agree, attempt to resolve the dispute by any means the *Adviser,* having regard to the principles set out in clause 8.2.1(e), considers appropriate; or

(2) if the parties do not agree to the *Adviser* attempting to resolve the dispute in accordance with clause 8.2.5(c)(1), refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.

(d) If the *Adviser*, having attempted to resolve the dispute in accordance with clause 8.2.5(c)(1), considers that such attempt is unlikely to result in resolution of the dispute within a reasonable time, the *Adviser* may, at any

time, refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.

(e) Where the *Adviser* refers a dispute to a *DRP*, the *Adviser* must promptly *publish* to all *Registered Participants*, as well as promptly notify *AEMO*, the *AER* and the *AEMC* of, the fact that the referral has been made.

8.2.6A Establishment of Dispute Resolution Panel

(a) Where the *Adviser* decides to refer a dispute for resolution by a *DRP*, the *Adviser* must establish the *DRP* to determine the dispute.

(b) **[Deleted]**

(c) The *Adviser* must consult with the parties to the Stage 1 dispute resolution process on the composition of the *DRP*. For the avoidance of doubt, the requirement to consult on the composition of the *DRP* does not apply with respect to a party that is later joined as, or that later opts to become, a party to the dispute.

(d) Despite the requirement to consult set out in clause 8.2.6A(c), a decision of the *Adviser* as to the composition of the *DRP* is final and binding upon all parties to the dispute.

(e) A *DRP* must comprise three members or, if the parties agree that the circumstances and nature of the dispute warrant a panel comprised of one or two members, the number so agreed.

(f) The *Adviser* may appoint as a member of the *DRP* any person who is a member of the pool established under clause 8.2.2(e) and who in the reasonable opinion of the *Adviser* is either:

(1) expert in the field to which the dispute relates; or

(2) experienced or trained in dispute resolution techniques.

(g) A person, whether a member of the pool established under clause 8.2.2(e) or not, is not eligible for appointment to a *DRP* if that person has any interest which may conflict with, or which may be seen to conflict with, the impartial resolution of the dispute. Where a person becomes aware of such a conflict after the *DRP* commences the determination of a dispute, the person must advise the parties to that effect.

(h) Where:

(1) a *Registered Participant* who is a party to the dispute believes that a person appointed to a *DRP* has an interest which may conflict with the impartial resolution of the dispute; or

(2) a person appointed to a *DRP* discloses the existence of such an interest:

the person must not continue as a member of the *DRP*, except with the written consent of all parties to the dispute.

(i) The *Adviser* may, if in his or her reasonable opinion no member of the pool established under clause 8.2.2(e) is:

(1) eligible for appointment to a *DRP*; or

(2) sufficiently skilled and experienced to resolve the dispute,

appoint to the *DRP* another person whom he or she considers to be eligible and sufficiently skilled and experienced, but who is not a member of the pool. A person so appointed is deemed to be a member of the pool on and from his or her appointment to the *DRP*.

(j) Any person who has previously been a member of a *DRP* is eligible for appointment to another *DRP*.

(k) The *Adviser* must nominate one of the *DRP* members to be the chairperson.

8.2.6B Parties to DRP Proceedings

(a) The following persons are parties to the dispute before a *DRP*:

(1) the parties to the Stage 1 dispute resolution process referred by the *Adviser* to the *DRP*;

(2) any other *Registered Participant* that the *DRP* directs to become a party to the dispute in accordance with clause 8.2.6B(b); and

(3) any other *Registered Participant* that has opted to become a party to the dispute in accordance with clause 8.2.6B(c).

(b) If the *DRP* considers that a *Registered Participant* should become a party to the dispute, it may direct the *Registered Participant* to become a party by giving that *Registered Participant's DMS Contact* written notice setting out:

(1) the names of the other parties to the dispute;

(2) a brief history of the dispute and the circumstances giving rise to it;

(3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute; and

(4) the grounds on which the *DRP* considers the *Registered Participant* should be made a party to the dispute.

(c) Any *Registered Participant* that has an interest in a dispute may opt to become a party to the dispute by giving notice to the *DRP* that it wishes to do so. When a *Registered Participant* opts to become a party to the dispute in accordance with this clause 8.2.6B(c), the *DRP* must give that *Registered Participant's DMS Contact* written notice setting out:

(1) the names of the other parties to the dispute;

(2) a brief history of the dispute and the circumstances giving rise to it; and

(3) the results of any previous dispute resolution processes undertaken pursuant to the *Rules* in respect of the dispute.

8.2.6C Proceedings of the DRP

(a) The *DRP* may give to the parties such directions as it considers necessary for the proper conduct of the proceedings, including, without limitation, a direction:

(1) that the proceedings be conducted at a specified venue or venues (including the premises of a party) at a specified time or times;

(2) requiring the parties to prepare and exchange written submissions;

(3) requiring the parties to exchange documents; and

(4) limiting or prohibiting the cross examination of witnesses.

(b) The *DRP* may direct the parties that the proceedings, or part of the proceedings, are to be conducted solely on the basis of documentary evidence and written submissions.

(c) The *DRP* may give to the parties such directions relating to the use and disclosure of information obtained from other parties to the dispute (including a direction to keep information confidential) as it considers necessary in the circumstances.

(d) At any time before it determines a dispute, the *DRP* may, with the consent of all parties, refer the dispute for mediation.

(e) A *DRP*:

(1) must determine the real questions in controversy between the parties; and

(2) is not bound by the parties' formulation of those questions.

(f) A *DRP*:

(1) is not bound by the rules of evidence and may inform itself in any way it thinks fit; but

(2) must observe the rules of natural justice.

8.2.6D Decisions of the DRP

(a) A decision of a *DRP* on any matter may be made by a majority of the members comprising the *DRP*. Where a *DRP* comprising two members is unable to reach a unanimous decision, the decision of the chairperson will be the decision of the *DRP*.

(b) Subject to clause 8.2.6D(c), a *DRP* must determine a dispute as quickly as possible, and in any case must do so:

(1) in the case of disputes involving two parties, within 30 *business days* after the dispute is referred to the *DRP*; and

(2) in the case of disputes involving more than two parties, within 70 *business days* after the dispute is referred to the *DRP*.

(c) A *DRP* may extend either of the periods specified in clause 8.2.6D(b) for determination of a dispute if:

(1) all parties to the dispute agree in writing;

(2) the *AER* agrees in writing; or

(3) the dispute is referred to mediation under clause 8.2.6C(d).

(d) A determination of the *DRP* may, without limitation of the *DRP's* power, require a party to do any or all of the following in such manner and within such time or times as is specified in the determination:

(1) take specified action;

(2) refrain from taking specified action; or

(3) pay a monetary amount to another party.

(e) Each party to a dispute that is required by a determination of the *DRP* to take specified action, to refrain from taking specified action or to pay a monetary amount must:

(1) do so within such period after being notified of the determination as is specified in the determination; and

(2) report to the *Adviser* as soon as practicable after doing so.

8.2.6 [Deleted]

8.2.7 Legal representation

(a) In any meeting, negotiation or mediation forming part of the Stage 1 dispute resolution process, a party is entitled to be legally represented.

(b) A *DRP* may give any direction it considers appropriate in relation to the role the parties' legal representatives may take in the proceedings.

8.2.8 Cost of dispute resolution

(a) The costs of any dispute resolution processes (other than legal costs of one or more parties), including the costs incurred by the *Adviser* in performing functions of the *Adviser* under clauses 8.2.5, 8.2.6A, 8.2.6B, 8.2.6C or 8.2.6D and the costs of the *DRP* and its members, are to be borne equally by the parties to the dispute unless:

(1) clause 8.2.8(b) applies; or

(2) otherwise agreed between the parties.

(b) Costs of the dispute resolution processes (including legal costs of one or more parties) may be allocated by the *DRP* for payment by one or more parties as part of any determination. Subject to clause 8.2.8(c), in deciding to allocate costs against one or more parties to a dispute, the *DRP* may have regard to any relevant matters, including (but not limited to) whether the conduct of that party or those parties unreasonably prolonged or escalated the dispute or otherwise increased the costs of the *DRP* proceedings.

(c) A party that disagrees with another party about the number of persons comprising a *DRP* is not to be taken, by reason only of that disagreement, to have unreasonably prolonged or escalated a dispute or otherwise increased the costs of the *DRP* proceedings.

8.2.9 Effect of resolution

(a) Where the parties to a dispute reach agreement (whether or not the matter is before a *DRP*), the parties may execute a written agreement recording that a party has or parties have agreed:

(1) to take certain action;

(2) not to take certain action; or

(3) to make a monetary payment.

(b) An agreement that is recorded in accordance with clause 8.2.9(a) and a determination of the *DRP* are binding on the parties to the dispute.

(c) A requirement that a *Registered Participant* pay moneys, imposed on the *Registered Participant* under:

(1) a determination of the *DRP*; or

(2) an agreement that is recorded in accordance with clause 8.2.9(a),

is an obligation under the *Rules* to pay such amounts. A *Registered Participant* or *AEMO* entitled to such amount may recover the amount in accordance with section 72 of the *National Electricity Law*.

(d) A *Registered Participant* must comply with a requirement or determination of the *DRP* and any agreement that is recorded in accordance with clause 8.2.9(a). Failure to do so is a breach of the *Rules* in respect of which the *AER* may take action in accordance with the *National Electricity Law*.

8.2.10 Recording and publication

(a) Where a *DRP* makes a determination, a copy of the determination must be forwarded to the *Adviser*.

(b) The *DRP* must provide a copy of its determination (save to the extent that it contains confidential information), to the *AER* for publication.

(c) The *AER* must, in accordance with the *Rules consultation procedures*, develop and issue guidelines relating to the confidentiality of information obtained, used or disclosed for the purposes of resolving a dispute to which rule 8.2 applies.

8.2.11 Appeals on questions of law

A party to a dispute may appeal on a question of law against a decision or determination of a *DRP* in accordance with section 71 of the *National Electricity Law*.

8.2.12 [Deleted]

8.2A B2B Determination Disputes

8.2A.1 Application of rule 8.2

Rule 8.2 applies to *B2B Determination Disputes* but with the modifications set out in clause 8.2A.2.

8.2A.2 How rule 8.2 applies

For the purposes of it application to a *B2B Determination Dispute*, rule 8.2 is modified as follows:

(a) For clause 8.2.1(a) substitute:

"(a)This clause 8.2 applies to a *B2B Determination Dispute*.".

(b) In clause 8.2.1(a1) delete "and *Connection Applicants* who are otherwise *Registered Participants*" and substitute "clause 8.2.9(c)" for "clauses 8.2.4(a) or 8.2.9(c)".

(c) For clause 8.2.1(e)(1) substitute:

"(1) be guided by the *B2B Objective* and the *B2B Principles*;".

(d) In clause 8.2.1(f):

(i) after "clause 8.12" insert "(as modified by clause 8.2A.2)"; and

(ii) insert a new sentence at the end of the clause as follows:

"The subject matter of a *B2B Determination Dispute* which has been determined by the *DRP* cannot be the subject of further review."

(e) For the avoidance of doubt, clause 8.2.3 does not apply to the *Information Exchange Committee*.

(f) The contact for the *Information Exchange Committee* in relation to disputes will be the *DMS Contact* for *AEMO.*

(g) Clause 8.2.4 does not apply.

(h) Clauses 8.2.5(a), (b), (c) and (d) do not apply.

(i) Insert new clauses 8.2.5(d1) to (d4) as follows:

"(d1) A *Market Customer*, *Local Retailer* or *Distribution Network Service Provider* adversely affected by an *Information Exchange Committee Recommendation* or a *B2B Decision* may apply to the *Adviser* for review of that *Information Exchange Committee Recommendation* or that *B2B Decision*. The application must be made within 10 *business days* of *publication* of the *Information Exchange Committee Recommendation* or the *B2B Decision*, state grounds for the review and give full particulars of where the applicant believes the *Information Exchange Committee Recommendation* or *B2B Decision* is in error.

(d2) Where an application for review of an *Information Exchange Committee Recommendation* is made, *AEMO* must not take any further action in relation to that *Information Exchange Committee Recommendation* until the *DRP* has made its decision in relation to the dispute.

(d3) An application for review of a *B2B Decision* stays the *B2B Decision*.

(d4) On receiving the application the *Adviser* must refer the dispute to a *DRP* for determination in accordance with clauses 8.2.6A to 8.2.6D.".

(j) In clause 8.2.6A(a), for "decides to refer" substitute "refers".

(k) In clause 8.2.6A(c), for "the parties to the Stage 1 dispute resolution process" substitute "the parties to the dispute".

(l) In clause 8.2.6A(h)(1) before "a *Registered Participant*" insert "the *Information Exchange Committee* or".

(m) For clause 8.2.6B(a)(1) substitute:

"(1) the *Registered Participant* making application for a review of the *Information Exchange Committee Recommendation* or the *B2B Decision*, a *Registered Participant* affected by the *Information Exchange Committee Recommendation* or the *B2B Decision* the subject of the application for review and the *Information Exchange Committee* or, if the *Information Exchange Committee* is unable to act as a party, any other *Registered Participant* wishing to support the position of the *Information Exchange Committee*;".

(n) At the end of clause 8.2.6B(a) insert:

"*AEMO* is a party to an application for review of a *B2B Decision* and may be a party, in accordance with clause 8.2.6B(b), to an application for review of an *Information Exchange Committee Recommendation*. In addition:

(1) where the *Information Exchange Committee* is unable to act as a party to a *B2B Determination Dispute*, and another *Registered Participant* is a party to support the position of the *Information Exchange Committee*, the *Information Exchange Committee* must give to that party all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance; and

(2) where *AEMO* is a party to a *B2B Determination Dispute*, the *Information Exchange Committee* must give *AEMO* all assistance including access to both documents and *Members*. A *Registered Participant* of which a *Member* is an employee must ensure that *Member* is available to provide such assistance.".

(o) Clause 8.2.6C(d) does not apply.

(p) Insert a new clause 8.2.6C(g) as follows:

"(g) In considering a *B2B Determination Dispute*, the *DRP* must conduct a full reconsideration of the *Information Exchange Committee Recommendation* or *B2B Decision* and:

(1) can rely on any material available and is not confined to only considering material that was before the *Information Exchange Committee* in relation to an *Information Exchange Committee Recommendation* or *AEMO* in relation to a *B2B Decision*; and

(2) may exercise all powers and discretions that are conferred on the *Information Exchange Committee* in relation to an *Information Exchange Committee Recommendation* or *AEMO* in relation to a *B2B Decision*.".

(q) Insert a new clause 8.2.6D(da) as follows:

"(da)The *DRP* must make a decision in writing:

(1) affirming the *Information Exchange Committee Recommendation* or the *B2B Decision*;

(2) varying the *Information Exchange Committee Recommendation* or the *B2B Decision*; or

(3) setting aside the *Information Exchange Committee Recommendation* or the *B2B Decision* and substituting its own decision.".

(r) Clause 8.2.7(a) does not apply.

(s) In clause 8.2.8(a) after "8.2.6D" insert "(as modified by clause 8.2A.2)".

(t) Clauses 8.2.9(a), (b) and (c)(2) do not apply.

(u) In clause 8.2.9(d) after "*Registered Participant*" insert "and the *Information Exchange Committee*", and delete "and any agreement that is recorded in accordance with clause 8.2.9(a)".

(v) In clause 8.2.12(a), after "*Registered Participant*" insert "or the *Information Exchange Committee*".

8.3 [Deleted]

8.4 [Deleted]

8.5 [Deleted]

Part C Registered Participants' confidentiality obligations

8.6 Confidentiality

8.6.1 Confidentiality

(a) Each *Registered Participant* must use all reasonable endeavours to keep confidential any *confidential information* that comes into the possession or control of the *Registered Participant* or of which the *Registered Participant* becomes aware.

(b) A *Registered Participant*:

(1) must not disclose *confidential information* to any person except as permitted by the *Rules*;

(2) must only use or reproduce *confidential information* for the purpose for which it was disclosed or another purpose contemplated by the *Rules*; and

(3) must not permit unauthorised persons to have access to *confidential information*.

(c) Each *Registered Participant* must use all reasonable endeavours:

(1) to prevent unauthorised access to *confidential information* which is in the possession or control of that *Registered Participant*; and

(2) to ensure that any person to whom it discloses *confidential information* observes the provisions of this rule 8.6 in relation to that information.

(d) The officers of a *Transmission Network Service Provider* participating in *transmission service* pricing must not be involved in or associated with competitive electricity trading activities of any other *Registered Participant*.

(e) A *Transmission Network Service Provider* participating in *transmission service* pricing must provide to any *Transmission Network Service Provider* or *Registered Participant* which supplies information for *transmission service* pricing an undertaking that the *Transmission Network Service Provider* to which that information was supplied will comply with the confidentiality requirements set out in clause 6.9.2.

8.6.2 Exceptions

This rule 8.6 does not prevent:

(a) **(public domain)**: the disclosure, use or reproduction of information if the relevant information is at the time generally and publicly available other than as a result of breach of confidence by the *Registered Participant* who wishes to disclose, use or reproduce the information or any person to whom the *Registered Participant* has disclosed the information;

(b) **(employees and advisers)**: the disclosure of information by a *Registered Participant* or the *Registered Participant*'s *Disclosees* to:

(1) an employee or officer of the *Registered Participant* or a *related body corporate* of the *Registered Participant*; or

(2) a legal or other professional adviser, auditor or other consultant (in this clause 8.6.2(b) called "Consultants") of the *Registered Participant*,

which require the information for the purposes of the *Rules*, or for the purpose of advising the *Registered Participant* or the *Registered Participant*'s *Disclosee* in relation thereto;

(c) **(consent)**: the disclosure, use or reproduction of information with the consent of the person or persons who provided the relevant information under the *Rules*;

(d) **(law)**: the disclosure, use or reproduction of information to the extent required by law or by a lawful requirement of:

(1) any government or governmental body, authority or agency having jurisdiction over a *Registered Participant* or its *related bodies corporate*; or

(2) any stock exchange having jurisdiction over a *Registered Participant* or its *related bodies corporate*;

(d1) **[Deleted]**

(e) **(disputes)**: the disclosure, use or reproduction of information if required in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanism relating to the *Rules*, or for the purpose of advising a person in relation thereto;

(f) **(trivial)**: the disclosure, use or reproduction of information which is trivial in nature;

(g) **(safety)**: the disclosure of information if required to protect the safety of personnel or equipment;

(h) **(potential investment)**: the disclosure, use or reproduction of information by or on behalf of a *Registered Participant* to the extent reasonably required in connection with the *Registered Participant*'s financing arrangements, investment in that *Registered Participant* or a disposal of that *Registered Participant*'s assets;

(i) **(regulator)**: the disclosure of information to the *AER*, the *AEMC* or the *ACCC* or any other regulatory authority having jurisdiction over a *Registered Participant*, pursuant to the *Rules* or otherwise;

(j) **(reports)**: the disclosure, use or reproduction of information of an historical nature in connection with the preparation and giving of reports under the *Rules*;

(k) **(aggregate sum)**: the disclosure, use or reproduction of information as an unidentifiable component of an aggregate sum;

(l) **(profile)**: the publication of a *profile*;

(m) **[Deleted]**

(n) **[Deleted]**

(o) **[Deleted]**

8.6.3 Conditions

In the case of a disclosure under clauses 8.6.2(b), 8.6.2(d1) or 8.6.2(h), prior to making the disclosure the *Registered Participant* that wishes to make the disclosure must inform the proposed recipient of the confidentiality of the information and must take appropriate precautions to ensure that the proposed recipient keeps the information confidential in accordance with the provisions of this rule 8.6 and does not use the information for any purpose other than that permitted under clause 8.6.1.

8.6.4 [Deleted]

8.6.5 Indemnity to AER, AEMC and AEMO

Each *Registered Participant* must indemnify the *AER*, the *AEMC* and *AEMO* against any claim, action, damage, loss, liability, expense or outgoing which the *AER*, the *AEMC* or *AEMO* pays, suffers, incurs or is liable for in respect of any breach by that *Registered Participant* or any officer, agent or employee of that *Registered Participant* of this rule 8.6.

8.6.6 AEMO information

AEMO must develop and, to the extent practicable, implement a policy:

(a) to protect information which it acquires pursuant to its various functions from use or access which is contrary to the provisions of the *Rules*;

(b) to disseminate such information in accordance with its rights, powers and obligations in a manner which promotes the orderly operation of any *market*; and

(c) to ensure that *AEMO*, in undertaking any trading activity except the procurement of *ancillary services*, does not make use of such information unless the information is also available to other *Registered Participants*.

8.6.7 Information on Rules Bodies

AEMO must, in consultation with the *AEMC*, develop and implement policies concerning:

(a) the protection of information which *Rules bodies* acquire pursuant to their various functions from use or access by *Registered Participants* or *Rules bodies* which is contrary to the provisions of the *Rules*; and

(b) the dissemination of such information where appropriate to *Registered Participants*.

Part D Monitoring and reporting

8.7 Monitoring and Reporting

8.7.1 Monitoring

(a) **[Deleted]**

(b) The *AER* must, for the purpose of performing its monitoring functions:

(1) determine whether *Registered Participants* and *AEMO* are complying with the *Rules*;

(2) assess whether the dispute resolution and *Rules* enforcement mechanisms are working effectively in the manner intended; and

(3) **[Deleted]**

(4) collect, analyse and disseminate information relevant and sufficient to enable it to comply with its reporting and other obligations and powers under the *Rules*.

(c) The AER must ensure that, to the extent practicable in light of the matters set out in clause 8.7.1(b), the monitoring processes which it implements under this rule 8.7:

(1) are consistent over time;

(2) do not discriminate unnecessarily between *Registered Participants*;

(3) are cost effective to both the *AER*, all *Registered Participants* and *AEMO*; and

(4) subject to confidentiality obligations, are publicised or available to the public.

8.7.2 Reporting requirements and monitoring standards for Registered Participants and AEMO

(a) For the purpose of performing its monitoring functions, the *AER* must establish:

(1) reporting requirements which apply to all or particular categories of *Registered Participants* in relation to matters relevant to the *Rules*;

(2) reporting requirements for *AEMO* in relation to matters relevant to the *Rules*;

(3) procedures and standards generally applicable to *Registered Participants* relating to information and data received by them in relation to matters relevant to the *Rules*;

(4) procedures and standards applicable to *AEMO* relating to information and data received by it in relation to matters relevant to the *Rules*; and

(5) procedures and standards applicable to the *AER* relating to information and data received by the *AER* from *Registered Participants* or *AEMO* in relation to matters relevant to the *Rules*.

(b) The *AER* must:

(1) after consultation with the *AEMC*, *AEMO* and *Registered Participants* in accordance with the *Rules consultation procedures*, establish the requirements and standards and procedures referred to in clause 8.7.2(a)(1), (3), (4) and (5); and

(2) after consultation with the *AEMC*, *AEMO* and such *Registered Participants* as the *AER* considers appropriate, establish the requirements referred to in clause 8.7.2(a)(2).

In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c).

(c) Subject to clause 8.7.2(d), the *AER* must notify to *AEMO* and all *Registered Participants* particulars of the requirements and procedures and standards which it establishes under this clause 8.7.2.

(d) For the purpose of performing its monitoring functions, the *AER* may establish additional or more onerous requirements or procedures and standards which do not apply to all or a particular category of *Registered Participants*. In formulating such requirements or procedures and standards, the *AER* must take into consideration the matters set out in clause 8.7.1(c) and is not required to consult in accordance with the *Rules consultation procedures* but must consult with the relevant *Registered Participants*. In such a case, and if the *AER* considers it appropriate to do so, the *AER* may choose to notify only those *Registered Participants* to whom these additional or more onerous requirements or procedures and standards apply.

(e) Each *Registered Participant* and *AEMO* must comply with all requirements, procedures and standards established by the *AER* under this rule 8.7 to the extent that they are applicable to it within the time period specified for the requirement, procedure or standard or, if no such time period is specified, within a reasonable time. Each *Registered Participant* and *AEMO* must bear its own costs associated with complying with these requirements, procedures and standards.

(f) In complying with its obligations or pursuing its rights under the *Rules*, neither a *Registered Participant* nor *AEMO* must recklessly or knowingly provide, or permit any other person to provide on behalf of that *Registered Participant* or *AEMO* (as the case may be), misleading or deceptive data or information to any other person (including the *AER*).

(g) Any *Registered Participant* or *AEMO* may ask the *AER* to impose additional or more onerous requirements, procedures or standards under clause 8.7.2(d) on a *Registered Participant* in order to monitor or assess compliance with the *Rules* by that *Registered Participant*. When such a request is made, the *AER* may but is not required to impose the additional or more onerous requirements, procedures or standards.

If the *AER* decides to impose additional or more onerous requirements, procedures or standards on a *Registered Participant*, the *AER* may determine the allocation of costs of any additional compliance monitoring undertaken between the relevant *Registered Participants* and/or *AEMO* (as the case may be). The relevant *Registered Participants* and (to the extent relevant) *AEMO* must pay such costs as allocated. In the absence of such allocation, the *Registered Participant* which is subject to the additional or

more onerous requirements, procedures or standards must bear its own costs of compliance.

(h) The *AER* must develop and implement guidelines in accordance with the *Rules consultation procedures* governing the exercise of the powers conferred on it by clause 8.7.2(g) which guidelines must set out the matters to which the *AER* must have regard prior to deciding the allocation of costs of any additional or more onerous requirements, procedures or standards imposed pursuant to clause 8.7.2(g) between the relevant *Registered Participants* and/or *AEMO* (as the case may be).

8.7.3 Consultation required for making general regulatory information order (Section 28H of the NEL)

(a) Before the *AER* makes a *general regulatory information order*, it must publish:

(1) the proposed order;

(2) an explanatory statement that sets out objectives of the proposed order; and

(3) an invitation for written submissions on the proposed order.

(b) The invitation must allow no less than 30 *business days* for the making of submissions (and the *AER* is not required to consider any submission made after the period has expired).

(c) The *AER* may *publish* such issues, consultation and discussion papers, and hold such conferences and information sessions, in relation to the proposed order as it considers appropriate.

(d) Within 80 *business days* of *publishing* the documents referred to in paragraph (a), the *AER* must:

(1) consider any submissions made in response to the invitation within the period allowed in the invitation;

(2) make a final decision on the order; and

(3) *publish* the final decision including:

(i) a statement of the reasons for the final decision (including a summary of each material issue raised in the submissions and the *AER*'s response to it); and

(ii) if the final decision is to make the order (either in the terms in which it was proposed or in modified terms) – the order in its final form.

(e) The *AER* may extend the time within which it is required to publish its final decision if:

(1) the consultation involves questions of unusual complexity or difficulty; or

(2) the extension has become necessary because of circumstances beyond the *AER*'s control.

8.7.4 Preparation of network service provider performance report (Section 28V of the NEL)

(a) Before the *AER* embarks on the preparation of *network service provider performance reports*, the *AER* must consult with:

(1) *network service providers*; and

(2) bodies representative of the *network service providers* and *network service users*; and

(3) the public generally;

in order to determine appropriate priorities and objectives to be addressed through the preparation of *network service provider performance reports*.

(b) In the course of preparing a *network service provider performance report*, the *AER*:

(1) must consult with the *network service provider* or *network service providers* to which the report is to relate; and

(2) must consult with the authority responsible for the administration of relevant *jurisdictional electricity legislation* about relevant safety and technical obligations; and

(3) may consult with any other persons who have, in the *AER*'s opinion, a proper interest in the subject matter of the report; and

(4) may consult with the public.

(c) A *network service provider* to which the report is to relate:

(1) must be allowed an opportunity, at least 30 business days before publication of the report, to submit information and to make submissions relevant to the subject matter of the proposed report; and

(2) must be allowed an opportunity to comment on material of a factual nature to be included in the report.

8.7.5 [Deleted]

8.7.6 Recovery of reporting costs

Where, under the *Rules, AEMO* is entitled or required to publish or give information, notices or reports to:

(a) any *Registered Participant*, any court, the *ACCC* or the *AER,* unless the context otherwise requires, *AEMO* must not charge those persons a separate fee for providing them with a copy of the information or report and the costs in providing that service must be recovered through the *Participant fees* described in rule 2.12;

(b) any other person, *AEMO* may charge that person a fee which is appropriate to cover the costs of providing that service.

Part E Reliability panel

8.8 Reliability Panel

8.8.1 Purpose of Reliability Panel

(a) The functions of the *Reliability Panel* are to:

(1) monitor, review and report on the performance of the *market* in terms of *reliability* of the *power system*;

(1a) on the advice of *AEMO*, determine the *system restart standard*;

(2) review and, on the advice of *AEMO,* determine the *power system security and reliability standards*;

(2a) for the purposes of clause 4.2.6(b), develop and *publish* principles and guidelines that determine how *AEMO* should maintain *power system security* while taking into account the costs and benefits to the extent practicable;

(2b) determine, and modify as necessary, and *publish* the *template for generator compliance programs*;

(3) while *AEMO* has power to issue *directions* in connection with maintaining or re-establishing the *power system* in a *reliable operating state,* determine guidelines governing the exercise of that power;

(4) while *AEMO* has power to enter into contracts for the provision of *reserves*, determine policies and guidelines governing *AEMO's* exercise of that power;

(5) report to the *AEMC* and *participating jurisdictions* on overall *power system reliability* matters concerning the *power system* and on the matters referred to in clauses 8.8.1(a)(2) and (3), and make recommendations on *market* changes or changes to the *Rules* and any other matters which the *Reliability Panel* considers necessary;

(6) monitor, review and *publish* a report on the *system standards* in terms of whether they appropriately and adequately describe the expected technical performance conditions of the *power system*;

(7) monitor, review and *publish* a report on the implementation of *automatic access standards* and *minimum access standards* as *performance standards* in terms of whether:

(i) their application is causing, or is likely to cause, a material adverse effect on *power system security*; and

(ii) the *automatic access standards* and *minimum access standards* should be amended or removed;

(8) consider requests made in accordance with clause 5.3.3(b2) and, if appropriate, determine whether an existing Australian or international standard, or a part thereof, is to be adopted as a *plant standard* for a particular class of *plant; and*

(9) determine guidelines identifying or providing for the identification of operating incidents and other incidents that are of significance for the purposes of the definition of "Reviewable operating incident" in clause 4.8.15.

(b) In performing its functions set out in clause 8.8.1(a)(1) the *Reliability Panel* must not monitor, review or report on the performance of the *market* in terms of *reliability* of *distribution networks*, although it may collate, consider and report information in relation to the *reliability* of *distribution networks* as measured against the relevant standards of each *participating jurisdiction* in so far as the *reliability* of those *networks* impacts on overall *power system reliability*.

(c) The principles and guidelines *published* under clause 8.8.1(a)(2a):

(1) must be developed, and may only be amended, in accordance with the consultation process set out in clause 8.8.3;

(2) must include transitional arrangements which take into account the need to allow for the development and testing of an appropriate methodology by *AEMO*; and

(3) must take into account the results of any decision to revise *network constraints*.

8.8.2 Constitution of the Reliability Panel

(a) The *Reliability Panel* must consist of:

(1) a commissioner of the *AEMC* appointed by the *AEMC* to act as chairperson for a period of up to three years;

(2) the chief executive officer or a delegate of *AEMO*; and

(3) at least 5 but not more than 8 other persons appointed by the *AEMC* for a period of up to three years, such persons to include:

(A) a person representing *Generators*;

(B) a person representing *Market Customers*;

(C) a person representing *Transmission Network Service Providers*;

(D) a person representing *Distribution Network Service Providers*; and

(E) a person representing the interests of end use customers for electricity.

(b) Subject to clause 8.8.2(d) any person who has previously served on the *Reliability Panel* is eligible for reappointment to the *Reliability Panel* in accordance with this clause 8.8.2.

(c) In making appointments to the *Reliability Panel* under clause 8.8.2(a)(3), the *AEMC* must, to the extent reasonably practicable and subject to clause 8.8.2(c1), give effect to the intention that the persons so appointed:

(1) should be broadly representative, both geographically and by reference to *Registered Participants* and *participating jurisdictions*, of those persons with direct interests in *reliability* of electricity *supply* under the *market* arrangements;

(2) may include *Registered Participants* or their *representatives* or *participating jurisdictions*;

(3) must be independent of *AEMO*; and

(4) must, except in the case of the person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), be independent of all *System Operators*,

and if at any time:

(5) a person on the *Reliability Panel*, other than the chief executive officer or a delegate of *AEMO*, ceases to be independent of *AEMO*; or

(6) a person on the *Reliability Panel*, other than the person representing *Transmission Network Service Providers* appointed under clause 8.8.2(a)(3)(C), ceases to be independent of any *System Operator*,

the *AEMC* must remove that person from the *Reliability Panel*.

(c1) The persons referred to in clauses 8.8.2(a)(3)(A), (B), (C) and (D) must be appointed and removed by the *AEMC* after consultation with the class of *Registered Participants* the person is to represent, and the *AEMC* must:

(1) appoint a person agreed to by at least one third in number of the relevant class of *Registered Participants*; and

(2) commence consultation on the removal of such a person if requested to do so by a member of the relevant class of *Registered Participants*, and must remove that person if so agreed by at least one third in number of the relevant class of *Registered Participants*.

(d) The *AEMC* may remove any member of the *Reliability Panel*, including the chairperson, at any time during his or her term in the following circumstances:

(1) the person becomes insolvent or under administration;

(2) the person becomes of unsound mind or his or her estate is liable to be dealt with in any way under a law relating to mental health;

(3) the person resigns or dies;

(4) the *AEMC* is required to remove the person under clause 8.8.2(c) or 8.8.2(c1)(2); or

(5) the person fails to discharge the obligations of that office imposed by the *Rules*.

(d1) The person referred to in clause 8.8.2(a)(3)(E) must be appointed and removed by the *AEMC* after consultation with such bodies representing the interests of end use customers for electricity and other persons as the *AEMC* considers appropriate and, subject to such consultation, may be removed at any time for any reason.

(e) A person may resign from the *Reliability Panel* by giving notice in writing to that effect to the *AEMC*.

(f) The *Reliability Panel* must meet and regulate its meetings and conduct its business in accordance with the *Rules*.

(g) A decision of the *Reliability Panel* on any matter may be made by a majority of the members comprising the *Reliability Panel*. Where the

members of the *Reliability Panel* are equally divided on any matter, the chairperson has a casting vote.

8.8.3 Reliability review process

(a) As soon as practicable, the *Reliability Panel* must determine:

(1) the *power system security and reliability standards*;

(2) the guidelines referred to in clause 8.8.1(a)(3);

(3) the policies and guidelines referred to in clause 8.8.1(a)(4);

(4) the guidelines referred to in clause 8.8.1(a)(9);

(5) the *system restart standard*; and

(6) the *template for generator compliance programs,*

in accordance with this clause 8.8.3.

(aa) The *system restart standard* must:

(1) be consistent with the *SRAS* objective referred to in clause 3.11.4A(a);

(2) apply equally across all *regions*, unless the *Reliability Panel* varies the *system restart standard* between *electrical sub-networks* to the extent necessary:

(A) to reflect any technical system limitations or requirements; or

(B) if the benefits of adopting the *system restart standard* would be outweighed by the costs of implementing such a standard;

(3) identify the maximum amount of time within which *system restart ancillary services* are required to restore *supply* to a specified level;

(4) include guidelines on the required reliability of *primary restart services* and *secondary restart services*;

(5) include guidelines to be followed by *AEMO* in determining *electrical sub-networks*, including the determination of the appropriate number of *electrical sub-networks* and the characteristics required within an *electrical sub-network* (such as the amount of generation or *load*, or electrical distance between *generation centres*, within an *electrical sub-network*);

(6) include guidelines specifying the diversity and strategic locations required of *primary restart services* and *secondary restart services*;

(b) At least once each calendar year and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the performance of the *market* in terms of *reliability* of the *power system*, the *power system security and reliability standards*, the *system restart standard*, the guidelines referred to in clause 8.8.1(a)(3), the policies and guidelines referred to in clause 8.8.1(a)(4) and the guidelines referred to in clause 8.8.1(a)(9) in accordance with this clause 8.8.3.

(ba) At least every 3 years from the date the *template for generator compliance programs* is determined pursuant to clause 8.8.3(a) and at such other times as the *AEMC* may request, the *Reliability Panel* must conduct a review of the *template for generator compliance programs* in accordance with this clause 8.8.3. Following such a review, the *Reliability Panel* may amend the *template for generator compliance programs* in accordance with its report to the *AEMC* submitted under clause 8.8.3(j).

(c) The *AEMC* must advise the *Reliability Panel* of the terms of reference for any determination or review by the *Reliability Panel*. The *AEMC* may advise the *Reliability Panel* of standing terms of reference in relation to the reviews described in clauses 8.8.3(b) and 8.8.3(ba) from time to time.

(d) The *Reliability Panel* must give notice to all *Registered Participants* of a determination or review. The notice must give particulars of the terms of reference for the determination or review (as the case may be), the deadline for the receipt of any submissions to the *Reliability Panel* and the date and place for the meeting referred to in clause 8.8.3(f). The notice must be given at least 8 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.

(e) The deadline for receipt of submissions must not be earlier than 4 weeks prior to the meeting or such other time specified by the *AEMC* in any request for a review.

(f) The *Reliability Panel* must hold a meeting open to all *Registered Participants*.

(g) The meeting referred to in clause 8.8.3(f) must be held in the capital city of one of the *participating jurisdictions*. Selection of the relevant capital city in a particular case will be determined by the *Reliability Panel* on a rotating basis.

(h) The *Reliability Panel* may obtain such technical advice or assistance from time to time as it thinks appropriate including, without limitation, advice or assistance from *AEMO* and any *Registered Participant*.

(i) In undertaking any review and preparing any report and recommendations, the *Reliability Panel* must take into consideration the policy statements, directions or guidelines published by the *AEMC* from time to time.

(j) Following the conclusion of the meeting and consideration by the *Reliability Panel* of any submissions or comments made to it, the *Reliability Panel* must submit a written report to the *AEMC* on the review setting out its recommendations or determinations, its reasons for those recommendations or determinations and the procedure followed by the *Reliability Panel* in undertaking the review or determination. The report must be submitted to the *AEMC* no later than 6 weeks after the meeting referred to in clause 8.8.3(f) or such other deadline for reporting specified by the *AEMC* in any request for a review.

(k) The *AEMC* must, within 10 *days* of receiving the written report of the *Reliability Panel*, make the report publicly available (with the exclusion of material that cannot be disclosed consistently with the *AEMC's* obligations of confidentiality).

(l) The recommendations of the *Reliability Panel* may include (without limitation) recommended *changes* to the *Rules* in relation to matters concerning *reliability* of the *power system*.

Part F Rules consultation procedures

8.9 Rules Consultation Procedures

(a) These provisions apply wherever in the *Rules* any person ("the *consulting party*") is required to comply with the *Rules consultation procedures*. For the avoidance of doubt, the *Rules consultation procedures* are separate from, and do not apply to, the process for changing the *Rules* under Part 7 of the *National Electricity Law*.

(b) The *consulting party* must give a notice to all persons nominated (including *Intending Participants* in the class of persons nominated) by the relevant provision as those with whom consultation is required or, if no persons are specifically nominated, *AEMO*, all *Registered Participants* and *interested parties*, ("Consulted Persons") giving particulars of the matter under consultation.

(c) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the notice referred to in rule 8.9(b) to *AEMO*. Within 3 *business days* of receipt of the notice *AEMO* must *publish* the notice on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the notice referred to in rule 8.9(b) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the notice referred to in rule 8.9(b) on its website.

(d) The notice must invite interested Consulted Persons to make written submissions to the *consulting party* concerning the matter.

(e) A written submission may state whether a Consulted Person considers that a meeting is necessary or desirable in connection with the matter under consultation and, if so, the reasons why such a meeting is necessary or desirable. To be valid, a submission must be received not later than the date specified in the notice (not to be less than 25 *business days* after the notice referred to in rule 8.9(b) is given).

(f) The *consulting party* must consider all valid submissions within a period of not more than a further 20 *business days*. If the *consulting party,* after having considered all valid submissions, concludes that it is desirable or necessary to hold any meetings, the *consulting party* must use its best endeavours to hold such meetings with Consulted Persons who have requested meetings within a further 25 *business days.*

(g) Following the conclusion of any meetings held in accordance with rule 8.9(f) and the *consulting party's* consideration of a matter under consultation, the *consulting party* must publish a draft report, available to all Consulted Persons, setting out:

(1) the conclusions and any determinations of the *consulting party;*

(2) its reasons for those conclusions;

(3) the procedure followed by the *consulting party* in considering the matter;

(4) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons or in meetings, and the *consulting party's* response to each such issue; and

(5) in a notice at the front of the draft report, an invitation to Consulted Persons to make written submissions to the *consulting party* on the draft report,

and, subject to its confidentiality obligations, the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.

(h) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the draft report referred to in rule 8.9(g) to *AEMO*. Within 3 *business days* of receipt of the draft report *AEMO* must *publish* the draft report on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the draft report referred to in rule 8.9(g) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the draft report referred to in rule 8.9(g) on its website.

(i) To be valid, a submission invited in a notice referred to in rule 8.9(g)(5) must be received not later than the date specified in the notice (not to be less than 10 *business days* after the publication of the draft report pursuant to rule 8.9(h) or such longer period as is reasonably determined by the *consulting party* having regard to the complexity of the matters and issues under consideration).

(j) The *consulting party* must consider all valid submissions within a period of not more than a further 30 *business day*s.

(k) Following the conclusion of the *consulting party's* consideration of all valid submissions the *consulting party* must publish a final report, available to all Consulted Persons, setting out:

(1) the conclusions and any determinations of the *consulting party* on the matter under consultation;

(2) its reasons for those conclusions;

(3) the procedure followed by the *consulting party* in considering the matter;

(4) summaries required pursuant to rule 8.9(g)(4); and

(5) summaries of each issue, that the *consulting party* reasonably considers to be material, contained in valid written submissions received from Consulted Persons on the draft report and the *consulting party's* response to each such submission,

and, subject to its confidentiality obligations the *consulting party* must make available to all Consulted Persons, on request, copies of any material submitted to the *consulting party*.

(l) Except where the *consulting party* is the *AEMC*, or the *AER*, the *consulting party* must provide a copy of the final report referred to in rule 8.9(k) to *AEMO*. Within 3 *business days* of receipt of the final report *AEMO* must *publish* the final report on its website. Where the *AEMC* is the *consulting party*, the *AEMC* must *publish* the final report referred to in rule 8.9(k) on its website. Where the *AER* is the *consulting party*, the *AER* must *publish* the final report referred to in rule 8.9(k) on its website.

(m) The *consulting party* must not make the decision or determination in relation to which the *Rules consultation procedures* apply until the *consulting party* has completed all the procedures set out in this clause.

(n) Notwithstanding rule 8.9(m), substantial compliance by a *consulting party* with the procedures set out in this clause is sufficient.

Part G Consumer Advocacy Panel

8.10 Consumer advocacy funding obligation

(a) *AEMO* must pay to the AEMC, as required under the relevant Act, the amount of its consumer advocacy funding obligation for each financial year.

(b) *AEMO* may recover the costs of meeting its consumer advocacy funding obligation from *participant fees* and may allocate the costs to market customers.

(c) In this rule:

consumer advocacy funding obligation means any costs allocated to *AEMO* by the *AEMC* in accordance with section 44 of the relevant Act.

Consumer Advocacy Panel means the Consumer Advocacy Panel established under the relevant Act.

relevant Act means the *Australian Energy Market Commission Establishment Act 2004* (SA).

Part H Augmentations

8.11.1 Application

This Part applies only to, and in relation to, the *declared transmission system* of an *adoptive jurisdiction* in which *AEMO* is authorised to exercise its *declared network functions*.

8.11.2 Object

The objects of this rule are:

(1) to establish the distinction between *contestable augmentations* and *augmentations* that are not contestable; and

(2) to regulate the process for calling, receiving and evaluating tenders for the construction and operation of a *contestable augmentation*; and

(3) to facilitate the construction and operation of *augmentations*; and

(4) to provide guidance on risk allocation and other commercial principles to be reflected in *network agreements* and *augmentation* connection agreements; and

(5) to make provision for certain matters with respect to *AEMO*'s planning of the *declared shared network*.

8.11.3 Definitions

In this Part:

augmentation connection agreement has the meaning given in the *National Electricity Law*.

augmentation direction means a direction given by *AEMO* to an incumbent *declared transmission system operator* to construct an *augmentation* of a *declared shared network* that is not a *contestable augmentation*.

contestable augmentation means an *augmentation* classified as a *contestable augmentation* under clause 8.11.6.

contestable provider means a person responsible for the construction or operation of a *contestable augmentation*.

incumbent declared transmission system operator means the *declared transmission system operator* that owns or operates the part of the *transmission system* to which the *augmentation* will connect.

potential contestable provider means a person who responds positively to a call for expressions of interest in constructing and operating a *contestable augmentation* under clause 8.11.7(b).

relevant limit means $10 million.

separable augmentation means an *augmentation* that satisfies both the following criteria:

(a) the *augmentation* will result in a distinct and definable service to be provided by the *contestable* provider to *AEMO*;

(b) the *augmentation* will not have a material adverse effect on the incumbent *declared transmission system operator*'s ability to provide services to *AEMO* under any relevant *network agreement*.

8.11.4 Planning criteria

(a) *AEMO* must *publish* the planning criteria that it proposes to use in performing its *declared network functions*.

(b) The planning criteria:

(1) must outline the principles on which *AEMO* will carry out a cost benefit analysis of a proposed *augmentation* under section 50F of the *National Electricity Law*; and

(2) must describe how *AEMO* proposes to apply a probabilistic approach in determining the benefit of a proposed *augmentation*; and

(3) must describe the kind of circumstances in which a probabilistic approach will be regarded as inappropriate; and

(4) may deal with any other aspect of planning inherent in, or related to, *AEMO's declared network functions*.

8.11.5 Construction of augmentation that is not a contestable augmentation

(a) An incumbent *declared transmission system operator* must, at *AEMO's* written request, provide *AEMO* with information and assistance that *AEMO* reasonably requires to decide:

(1) whether to give an *augmentation direction*; and

(2) if so, the terms of the direction.

(b) If *AEMO* gives an *augmentation direction*, *AEMO* and the incumbent *declared transmission system operator* must negotiate in good faith with a view to reaching agreement on the terms of an appropriate amendment to the operator's *network agreement* covering:

(1) the operation of the *augmentation*; and

(2) the use of the *augmentation* to provide *shared network capability services*; and

(3) the basis on which *AEMO* will pay for *shared network capability services* provided by means of the *augmentation.*

Note

If there is a dispute about the proposed amendment, the *AER* may resolve the dispute and determine the terms of the amendment under section 50H and 50J of the *National Electricity Law*.

(c) An incumbent *declared transmission system operator* that is required by, or agrees with, a *Connection Applicant* to construct an *augmentation* that is not a *contestable augmentation,* must negotiate with the *Connection Applicant* in good faith with a view to reaching agreement on the terms of an appropriate amendment to their *connection agreement*.

(d) However, if the incumbent *declared transmission system operator* applies for revocation and substitution of its *revenue determination* on the basis of an *augmentation direction,* or a requirement by or agreement with a *Connection Applicant* to construct an *augmentation* that is not a *contestable augmentation*, negotiations are not required on a matter to which the application relates.

8.11.6 Contestable augmentations

(a) Subject to paragraph (b), an *augmentation* of a *declared shared network* is a *contestable augmentation* if:

(1) the capital cost of the *augmentation* is reasonably expected to exceed the relevant limit; and

(2) the *augmentation* is a separable *augmentation*.

(b) An *augmentation* of a *declared shared network* is not a *contestable augmentation* if:

(1) *AEMO* classifies the *augmentation* as non-*contestable* because the delay in implementation that would necessarily result from treating the *augmentation* as a *contestable augmentation* would unduly prejudice system security; or

(2) *AEMO* classifies the *augmentation* as non-*contestable* because it does not consider it economical or practicable to treat the *augmentation* as a *contestable augmentation*.

8.11.7 Construction and operation of contestable augmentation

(a) For the purpose of procuring the construction and operation of a *contestable augmentation*, *AEMO* must:

(1) publish a generally applicable tender and evaluation process that accords with best practice as currently understood and may include, but need not be limited to:

(i) typical timetables for the tender and evaluation process; and

(ii) details of typical evaluation criteria; and

(iii) indications of the way in which different matters are to be or might be weighted for evaluation purposes; and

(iv) provision for declaration and management of conflicts of interest; and

(v) provision for the debriefing of unsuccessful tenderers; and

(2) *publish* a register of persons who have from time to time expressed interest in being *contestable* providers and keep the register up to date to reflect the developing market.

(b) For each *contestable augmentation*, *AEMO* must:

(1) call for expressions of interest from persons who may be interested in constructing and operating the proposed *contestable augmentation*; and

(2) prepare, in consultation with the incumbent *declared transmission system operator*, a timetable allowing *AEMO* and the incumbent *declared transmission system operator* a reasonable time to comply with their respective obligations and allowing a reasonable construction period having regard to the nature and extent of the *augmentation*; and

(3) prepare, in consultation with the incumbent *declared transmission system operator,* a detailed tender specification setting out the scope of the work involved in the *augmentation*, including details of the technical interface required for the *augmentation*; and

(4) prepare and issue an invitation to tender setting out details of the *contestable augmentation* and the tender and evaluation process ─ details that must (without limitation):

(i) provide as much certainty as is reasonably practicable to tenderers regarding the terms and conditions subject to which they are invited to tender for the work involved in the *contestable augmentation*; and

(ii) identify the relevant land (if any) that is available for or in connection with the *contestable augmentation*, including (to the extent reasonably practicable) details of current usage and, if available, a geotechnical and environmental report on the land; and

(iii) specify (to the extent reasonably practicable) the services to be provided under the *network agreement*;

(5) make available to potential *contestable* providers a copy of any proposed *augmentation* connection agreement or *network agreement*.

(c) The incumbent *declared transmission system operator* must:

(1) provide, within a reasonable period specified by *AEMO*, information and assistance reasonably required by *AEMO* for the preparation of the tender documents such as information about the technical interface and information required for the preparation of the tender specification; and

(2) negotiate in good faith with a potential *contestable* provider about changes to the proposed *augmentation* connection agreement that are sought or suggested by that potential *contestable* provider.

(d) The incumbent *declared transmission system operator* may tender for work involved in a *contestable augmentation*.

(e) *AEMO* must evaluate, assess and negotiate responses to the invitation to tender in accordance with the published tender and evaluation process.

(f) After completing the tender and evaluation process, *AEMO* must notify all persons who submitted tenders of the successful tender.

(g) *AEMO* may only proceed with a *contestable augmentation* on the basis of a tender accepted after evaluation and assessment in accordance with the published tender and evaluation process.

(h) The successful tenderer:

(1) must enter into an agreement with *AEMO*, based on the successful tender, for the construction of the *augmentation*; and

(2) must (unless the incumbent *declared transmission system operator* is itself the successful tenderer) enter into an *augmentation* connection agreement with the incumbent *declared transmission system operator.*

(i) This clause does not apply to a *funded augmentation* unless *AEMO* and the *Connection Applicant* agree to the conduct of a tender process.

8.11.8 Funded augmentations that are not subject to the tender process

(a) This clause applies to a *contestable augmentation* that is a *funded augmentation* except in the case where *AEMO* and the *Connection Applicant* agree to the conduct of a tender process in accordance with clause 8.11.7.

(b) For each *contestable augmentation* to which this clause applies, *AEMO* must:

(1) prepare, in consultation with the incumbent *declared transmission system operator* and the *Connection Applicant*, a timetable allowing *AEMO* and the incumbent *declared transmission system operator* a reasonable time to comply with their respective obligations and allowing a reasonable construction period having regard to the nature and extent of the *augmentation*; and

(2) prepare, in consultation with the incumbent *declared transmission system operator* and the *Connection Applicant,* a detailed specification setting out the scope of the work involved in the *augmentation*, including details of the technical interface required for the *augmentation*; and

(3) make available to the incumbent *declared transmission system operator* and the *Connection Applicant* a copy of any proposed *augmentation* connection agreement.

(c) The incumbent *declared transmission system operator* must:

(1) provide, within a reasonable period specified by *AEMO*, information and assistance reasonably required by *AEMO* for the preparation of an agreement for the construction of proposed *contestable augmentation*; and

(2) negotiate in good faith with the *Connection Applicant* about any changes to the proposed *augmentation* connection agreement that are sought or suggested by the *Connection Applicant*; and

(3) enter into an *augmentation connection agreement* with the *Connection Applicant*.

(d) The *Connection Applicant* must enter into an agreement with *AEMO* for the construction of the *augmentation.*

8.11.9 Contractual requirements and principles

(a) A *network agreement* or an *augmentation connection agreement* related to a *contestable augmentation* should be consistent with the requirements and principles set out in Schedule 8.11 to this Chapter.

(b) If a person submits a tender for a *contestable augmentation* proposing a *network agreement* or an *augmentation connection agreement* that is not consistent with the requirements and principles set out in Schedule 8.11 to this Chapter, the person must, in responding to the invitation to tender, include a statement drawing *AEMO*'s attention to the inconsistency and explaining the reasons for it.

(c) Despite the provisions of this clause and Schedule 8.11:

(1) *AEMO* and the other party or parties to a *network agreement* may agree terms and conditions of an amendment that differ from the requirements and principles set out in Schedule 8.11; and

(2) the parties to an *augmentation connection agreement* may, with *AEMO's* consent, agree terms and conditions that differ from the requirements and principles set out in Schedule 8.11.

8.11.10 Annual planning review

AEMO must in its annual planning review indicate:

(a) which *augmentations* commenced in the previous year are *contestable augmentations*; and

(b) which *augmentations* planned to commence in the present or future years are likely to be *contestable augmentations*.

Schedule 8.11 Principles to be reflected in agreements relating to contestable augmentations

S8.11.1 Risk allocation

(a) This clause sets out the risk allocation principles.

(b) **Site/Construction Risk**

Site/construction risk is the risk that unanticipated difficulties or liabilities associated with the site or the construction work will adversely affect the *contestable* provider's ability to deliver network services at the price agreed with *AEMO*. This risk comprises (for example) the risk of contamination of the land and the risk that unforeseen difficulties (such as difficulties in sourcing necessary materials) will impede the construction of the *augmentation.*

Site/construction risk is allocated to the *contestable* provider.

(c) **Statutory approval risk**

This is the risk that a necessary planning, environmental, building or other approval will be refused or granted on conditions adversely affecting the costs of constructing or operating the *contestable augmentation*.

This risk is allocated to the *contestable* provider.

(d) **Native title risk**

This is the risk that actual or potential native title claims will adversely affect the cost of the *augmentation*.

This risk is allocated to the *contestable* provider.

(e) **Output specification risk**

This is the risk that inadequacies in the output specification will cause or contribute to design inadequacies. This risk is allocated to *AEMO* to the extent the inadequacies in the output specification are attributable to *AEMO*. To the extent the inadequacies are attributable to incorrect information provided by the incumbent *declared transmission system operator,* the risk is allocated to the operator.

(f) **Design, construction and commissioning risk**

This is the risk that an unanticipated increase in the costs of the *augmentation* will have a significant adverse impact on the viability or profitability of the *contestable augmentation*.

This risk is allocated to the *contestable* provider.

(g) **Operating risk**

This is the risk that the *contestable* provider will fail, for a reason other than force majeure or inadequate financial resources, to deliver the *electricity network services* purchased by *AEMO*. It includes (for example) the risk of systems failure.

This risk is allocated to the *contestable* provider.

(h) **Network and interface risk**

This is the risk that the interface between the *augmentation* and the *declared transmission system* will not be constructed or operated in accordance with the tender specification or to a satisfactory standard with the result that the safety, reliability or security of the supply of electricity or the national electricity system (or both) will be adversely affected.

This risk is allocated to the party whose system affects the other in an adverse way. If, however, the adverse result is directly caused by the provision of incorrect information, the risk is allocated to the party that provided the incorrect information.

(i) **Industrial relations risk**

This is the risk that industrial action will adversely affect the construction of the *augmentation* or the delivery of *electricity network services* by means of the *augmentation*.

This risk is allocated to the *contestable* provider. If, however, industrial action directed at the incumbent *declared transmission system operator* causes the adverse effect, the risk is allocated to the operator.

S8.11.2 Minimum requirements for agreements relating to contestable augmentation

(a) An *augmentation connection agreement* must specify:

(1) the technical and other details of *connection* (including the *connection point*); and

(2) the *performance standards* that apply to the *contestable* provider.

(b) There should be no material difference between *performance standards* that apply to the incumbent *declared transmission system operator* and those that apply to the *contestable* provider.

S8.11.3 Matters to be dealt with in relevant agreements

(a) A relevant agreement should (in addition to the other requirements of the *National Electricity Law* and these *Rules*) contain provisions with respect to:

(1) the risks set out in clause S8.11.1; and

(2) force majeure events; and

(3) project financing risks; and

(4) liabilities and indemnities; and

(5) any relevant *regulatory obligation or requirement*.

(b) In this clause:

relevant agreement means:

(a) a network agreement; or

(b) an augmentation connection agreement.

CHAPTER 8A

8A. Participant Derogations

Note
This Chapter contains the *participant derogations* for the purposes of the *National Electricity Law* and the *Rules.*

Part 1 – Derogations Granted to TransGrid

8A.1 Derogation for the Treatment of Contingent Projects under Revenue Determination

8A.1.1 Expiry date

This derogation expires on 1 July 2009.

8A.1.2 Definitions

In this *participant derogation*:

contingent project means a project approved by the *ACCC* and identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the "Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09" dated 27 April 2005 determined by the *ACCC* pursuant to clause 6.2.4(b) of the National Electricity Code.

maximum allowed revenue means the maximum allowed revenue in the Determination.

TransGrid means the energy services corporation constituted under section 6A of the Energy Services Corporations Act 1995 (NSW).

trigger event means an event identified as a trigger in Attachment G of the Determination in respect of a contingent project.

8A.1.3 Treatment of contingent projects

(a) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the *AER* must, in accordance with the Determination:

(1) determine:

(i) the total capital expenditure which the *AER* considers is reasonably required for the purpose of undertaking the contingent project*;*

(ii) the forecast capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the current regulatory control period, which the *AER* considers is

reasonably required for the purpose of undertaking the contingent project in accordance with Appendix F of the Determination;

(iii) the likely commencement and completion dates for the contingent project;

(iv) the incremental revenue which is likely to be earned by TransGrid in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and

(v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year; and

(2) calculate the estimate referred to in subparagraph (1)(iii) in accordance with the Determination, including:

(i) on the basis of the rate of return for TransGrid for the current regulatory control period; and

(ii) consistently with the manner in which depreciation is calculated under the Determination; and

(3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (b).

(b) The *AER* may only vary the Determination to the extent necessary:

(1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (a)(1)(i); and

(2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (a)(1)(ii); and

(3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.

(c) The intended date for commencing the contingent project must be during the current regulatory control period.

Part 2 - Derogations Granted to EnergyAustralia

8A.2 Derogation from clause 3.18.2(g)(2) - Auctions and eligible persons

8A.2.1 Definitions

In this *participant derogation*, rule 8A.2:

commencement date means the day the National Electricity Amendment (EnergyAustralia Participant Derogation (Settlement Residue Auctions)) Rule 2006 commences operation.

EnergyAustralia means the energy distributor known as EnergyAustralia and established under the Energy Services Corporations Act 1995 (NSW).

8A.2.2 Expiry date

This *participant derogation* expires on the earlier of:

(1) 30 June 2012;

(2) the date that EnergyAustralia's retail business is transferred to a new legal entity pursuant to a NSW Government restructure of EnergyAustralia or by any other means;

(3) the date that EnergyAustralia ceases to engage in the activity of owning, controlling or operating a *transmission system*;

(4) the first date after the commencement date on which EnergyAustralia engages in the activity of owning, controlling or operating a *transmission system* that *NEMMCO* determines, in accordance with the criteria developed pursuant to clause 5.6.3(i), is capable of having a material impact on *interconnector* capability; or

(5) the date that EnergyAustralia is not excluded from entering into *SRD agreements* under clause 3.18.2(g)(2).

8A.2.3 Derogation

(a) The reference in clause 3.18.2(g)(2) to *Transmission Network Service Provider* does not include EnergyAustralia.

(b) If this *participant derogation* expires due to the occurrence of the event in clause 8A.2.2(4) of clause 8A2.2, then any *SRD agreement* between *NEMMCO* and EnergyAustralia which is in existence on that date, will terminate on that date.

8A.2A Derogation from inspection and testing of metering installations

8A.2A.1 Definitions

In this *participant derogation*, rule 8A.2A:

EnergyAustralia means the energy distributor known as EnergyAustralia and established under the Energy Services Corporations Act 1995 (NSW).

EnergyAustralia transmission metering installations means any type 2 and type 3 *metering installation* located at the interface between EnergyAustralia's *transmission network* and EnergyAustralia's *distribution network* in New South Wales on the date that the National Electricity Amendment (EnergyAustralia Participant Derogation (Metering Installations)) Rule 2006 commences operation.

expiry date means 1 July 2009 or the publishing of an expiration notice by the *AEMC* under clause 8A.2A.2(h) of this *participant derogation*.

report means a report in writing submitted by EnergyAustralia at 6 monthly intervals, which is prepared as soon as practicable after the EnergyAustralia transmission metering installations are tested, that outlines compliance of the EnergyAustralia transmission metering installations with the requirements of the derogated provisions of the *Rules* as identified in clause 8A.2A.2.

type 2 and type 3 *metering installation* means the meaning given to type 2 and type 3 *metering installations* in Chapter 7 of the *Rules*.

8A.2A.2 Derogation

(a) Until the expiry date, the following clauses of the *Rules* (referred to as the '**derogated provisions of the *Rules***') do not apply to EnergyAustralia transmission *metering installations*:

(1) clause 7.3.1(a)(2);

(2) clause 7.3.4(a); and

(3) clause 7.6.1(a)(2).

(b) Until the expiry date, the EnergyAustralia transmission *metering installations* and the *metering data* generated from them is taken to comply with the requirements of the derogated provisions of the *Rules*.

(c) Until the expiry date, EnergyAustralia must provide a report to *NEMMCO*.

(d) If *NEMMCO* is not satisfied that a report is satisfactory, *NEMMCO* may give notice to EnergyAustralia that it will recommend to the *AEMC* the

issue of a notice under paragraph (f) if the next report continues to be unsatisfactory.

(e) Where a report is unsatisfactory, *NEMMCO* may make appropriate adjustments to the *metering data* in the report to take account of errors in that data, in order to minimise adjustments to the final *settlements* account or for any other requirement of the *Rules*.

(f) If notice was given to EnergyAustralia under paragraph (d) and *NEMMCO* considers that the next report continues to be unsatisfactory, *NEMMCO* may recommend to the *AEMC* the issue of an expiration notice under paragraph (g).

(g) If *NEMMCO* recommends to the *AEMC* the issue of an expiration notice, the *AEMC* may issue a notice having regard to that recommendation and the *national electricity objective*.

(h) A notice must be published in the South Australian Government Gazette and takes effect 4 weeks after it is published.

Part 3 [Deleted]

Part 4 [Deleted]

Part 5 [Deleted]

Part 6 - Derogations Granted to Victorian Market Participants

[Deleted]

Part 7 - [Deleted]

Part 8 [Deleted]

Part 9 [Deleted]

Part 10 [Deleted]

Part 11 - [Deleted]

Part 12 - Ancillary Services Provisions

1. Transitional Arrangements

(a) The Invitation to Tender issued by *NEMMCO* on 18 October 2000 (as amended from time to time) (called the "Third ITT") is to be taken as having been a call for offers under clause 3.11.5 notwithstanding anything else in the *Rules* or the fact that the description and the procedure contemplated by clause 3.11.3 did not exist at the time the Third ITT was issued.

(b) Notwithstanding anything else in the *Rules*:

(1) the description of each *ancillary service* included in the Third ITT is deemed to be the description contemplated by clause 3.11.3; and

(2) the quantities specified as indicative *NEMMCO* requirements in schedule A to the Third ITT in respect of the *power system* are to be taken to have been determined by applying a procedure developed under clause 3.11.3.

2. [Deleted]

Part 13 - Derogation granted to Aurora Energy (Tamar Valley) Pty Ltd

8A.13 Derogation from clause S5.2.5.3 – Generating unit response to frequency disturbances

8A.13.1 Definitions

In this *participant derogation*, rule 8A.13:

AETV means Aurora Energy (Tamar Valley) Pty Ltd (ABN 29 123 391 613).

AETV *generating systems* means the *generating system* comprising AETV's Tamar Valley *power station*.

commencement date means the day the National Electricity Amendment (AETV Participant Derogation to Allow Operation of a New Power Station) Rule 2009 commences operation.

New Tasmanian *frequency operating standards* means the recommended Tasmanian *frequency operating standards* as determined by the *Reliability Panel* in its Final Report on the Tasmanian *Frequency Operating Standard* Review dated 18 December 2008, including but not limited to paragraph (h) in Part B of Appendix A of that Report.

Transend means Transend Networks Pty Limited (ABN 57 082 586 892).

8A.13.2 Expiry date

This *participant derogation* expires on the earlier of:

(a) the date on which the New Tasmanian *frequency operating standards* commences operation in the Tasmanian *region*; and

(b) 31 December 2009

(the **expiry date**).

8A.13.3 Derogation

(a) Until the expiry date and subject to clause 8A.13.3(b), the *minimum access standard* which applies under clause S5.2.5.3(c) for the purposes of determining the *negotiated access standard* for the AETV *generating system* in relation to the technical requirements in clause S5.2.5.3, will be determined by reference to the New Tasmanian *frequency operating standards.*

(b) Without limiting the rights and obligations of AETV, Transend and *AEMO* under clauses 5.3.4A and S5.2.5.3(c), any relevant arrangements which are required by the *Rules* until the expiry date, including:

(1) the details of the *protection system* which will trip the AETV *generating system* in accordance with the requirements of clause S5.2.5.3(c) if the *frequency* exceeds the level agreed with *AEMO* for the purposes of that clause; and

(2) the *frequency level* referred to in clause 8A.13.3(b)(1); and

(3) the implementation by AETV, Transend and/or *AEMO* of the limit referred to in paragraph (h) in Part B of Appendix A of the *Reliability Panel's* Final Report on Tasmanian *Frequency Operating Standards* Review dated 18 December 2008,

must be negotiated and agreed between AETV, Transend and *AEMO* before the AETV *generating system* is connected to Transend's *transmission system*.

CHAPTER 9

9. Jurisdictional Derogations and Transitional Arrangements

9.1 Purpose and Application

9.1.1 Purpose

(a) This Chapter contains the *jurisdictional derogations* that apply in relation to each *participating jurisdiction*.

(b) This Chapter prevails over all other Chapters of the *Rules*.

9.1.2 Jurisdictional Derogations

The *jurisdictional derogations* that apply in relation to each *participating jurisdiction* are set out in this Chapter as follows:

(a) Part A - Victoria;

(b) Part B - New South Wales;

(c) Part C - Australian Capital Territory;

(d) Part D - South Australia;

(e) Part E - Queensland; and

(f) Part F – Tasmania.

Part G sets out the Schedules to this Chapter 9.

Part A – Jurisdictional Derogations for Victoria

9.2 [Deleted]

9.3 Definitions

9.3.1 General Definitions

For the purposes of this Part A:

(1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and

(2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
Counterparties	In relation to the *Smelter Agreements*, means Portland Smelter Services Pty Ltd, Alcoa of Australia Limited or any other party to one or more of the *Smelter Agreements* (other than *SEC*).
CPI	The Consumer Price Index: All Groups Index Number Melbourne compiled by the Australian Bureau of Statistics.
distribution licence	A *licence* to distribute and supply electricity.
Distributor	A person who holds a *distribution licence*.
EI Act	Electricity Industry Act 2000 (Vic).
EI (RP) Act	Electricity Industry (Residual Provisions) Act 1993 (Vic).
ESC	The Essential Services Commission established under section 7 of the *ESC Act*.
ESC Act	The Essential Services Commission Act 2001 (Vic).
licence	A licence within the meaning of the *EI Act* or deemed to be issued under the *EI Act* by operation of clause 5 of Schedule 4 to the *EI (RP) Act*.
Quarter	The respective 3 monthly periods adopted by the Australian Bureau of Statistics for the compilation and issue of the CPI.
SEC	State Electricity Commission of Victoria established under the State Electricity Commission Act 1958 (Vic).

Column 1	Column 2
Smelter Agreements	Agreements, contracts and deeds referred to in Part A of schedule 3 to the *EI (RP) Act* in their form as at 1 July 1996 other than the Portland and Point Henry Flexible Tariff Deeds between *SEC* and the State Trust Corporation of Victoria.
Smelter Trader	*SEC* in its capacity as *Smelter Trader*.
System Code	The code of that name sealed by the Office of the Regulator-General under the Office of the Regulator-General Act 1994 (Vic) on 3 October 1994 and saved and continued in operation by section 67 of the *ESC Act*.
VENCorp	Victorian Energy Networks Corporation established under Division 2A of Part 2 of the Gas Industry Act 1994 (Vic) and continued under Part 8 of the Gas Industry Act 2001 (Vic).
Victorian Distribution Network	In relation to a person that holds a *distribution licence*, the *distribution systems* in Victoria to which that *licence* relates and includes any part of those systems.
Victorian Minister	The Minister who, for the time being, administers the National Electricity (Victoria) Act 1997 (Vic).
Victorian Transmission Network	The *declared shared network* of Victoria
Wholesale Metering Code	The code of that name sealed by the Office of the Regulator-General under the Office of the Regulator-General Act 1994 (Vic) on 3 October 1994, as in force immediately before *market commencement*.

9.3.2 [Deleted]

9.3A Fault levels

Subject to the terms of a *connection agreement* under section 50E(1)(a) of the *National Electricity Law*, *AEMO* must, when planning the *declared shared network*, use its best endeavours to ensure that fault levels at a *connection point* will not, as a result of a short circuit at that *connection point*, exceed the limits set out in the following table:

FAULT LEVEL TABLE

NOMINAL VOLTAGE AT CONNECTION POINT	THREE AND SINGLE PHASE DESIGN FAULT LEVEL
500kV Metro Latrobe Valley Country	 50.0 kA 63.0 kA 40.0 kA
330kV	40.0 kA
220kV Metro Latrobe Valley Country	 40.0 kA 40.0 kA 26.2 kA
66kV	21.9 kA
22kV	26.2 kA

9.4 Transitional Arrangements for Chapter 2 - Registered Participants, Registration and Cross Border Networks

9.4.1 [Deleted]

9.4.2 Smelter Trader

(a) For the purposes of the *Rules*:

(1) *Smelter Trader* is deemed to be entitled to register as a *Customer* in respect of the *connection points* used to supply the electricity supplied under the *Smelter Agreements*;

(2) *Smelter Trader* is deemed to be registered as a *Customer* and as a *Market Customer* in relation to the electricity supplied under the *Smelter Agreements;*

(3) the electricity supplied under the *Smelter Agreements* is deemed to have been classified as a *market load* and the *connection points* used to supply that electricity are deemed to have been classified as *Smelter Trader's market connection points*;

(4) *Smelter Trader* is deemed to be the person that must register as the *Generator* in relation to the *generating systems* forming part of Anglesea Power Station;

(5) *Smelter Trader* is deemed to be registered as a *Generator* and a *Market Generator* in relation to the *generating systems* forming part of the Anglesea Power Station;

(6) *Smelter Trader* is only a *Market Generator* in respect of the *generating systems* forming part of the Anglesea Power Station to the extent to which the electricity generated by those *generating systems* is available to the *Smelter Trader* for sale under the *Smelter Agreements*;

(7) none of the *Counterparties* is or is to be taken to be entitled to become a *Market Participant*, an *Intending Participant* or a *Customer* in respect of the electricity supplied under the *Smelter Agreements*;

(8) none of the *Counterparties* or any person that operates or controls the *generating systems* forming part of the Anglesea Power Station (other than *Smelter Trader*) is or is to be taken to be entitled to register as a *Generator* in relation to the *generating systems* forming part of the Anglesea Power Station; and

(9) each of the Counterparties and any person that owns, controls or operates the *generating systems* forming part of the Anglesea Power Station (other than *Smelter Trader*) is taken to have been exempted from the requirement to register as a *Generator* in relation to the *generating systems* forming part of the Anglesea Power Station.

(b) This clause 9.4.2 ceases to have effect upon the termination of the last of the *Smelter Agreements*.

9.4.3 Smelter Trader: compliance

(a) If complying with a requirement of the *Rules* (the "Rules Requirement") would result in the *Smelter Trader* being in breach of a provision of one or more of the *Smelter Agreements* (the "Contractual Requirement"), then the *Smelter Trader* is not required to comply with the Rules Requirement to the extent of the inconsistency between the Rules Requirement and the Contractual Requirement.

(b) If the *Smelter Trader* does not comply with a Rules Requirement in the circumstances described in clause 9.4.3(a), then the *Smelter Trader* must:

(1) give written notice to the *AER* of:

(i) the Rules Requirement which has not been complied with;

(ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and

(iii) details of each Contractual Requirement which is said by the *Smelter Trader* to be inconsistent with the Rules Requirement,

as soon as practicable and in any event within 30 *days* after the non-compliance with the Rules Requirement occurs or commences; and

(2) provide the *AER* with any documents or information in the possession or control of the *Smelter Trader* which evidence the matters referred to in clause 9.4.3(b)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

(c) If:

(1) the *Smelter Trader* requires the co-operation of a *Counterparty* to a *Smelter Agreement* to comply with a requirement of the *Rules*;

(2) the *Smelter Trader* has used reasonable endeavours to obtain the *Counterparty's* co-operation in order to enable the *Smelter Trader* to comply with that requirement; and

(3) under the *Smelter Agreements, SEC* has no ability to require the *Counterparty* to so co-operate with *SEC* and the *Counterparty* is not in breach of the *Smelter Agreements* by refusing to so co-operate with *SEC*,

then the *Smelter Trader* is not required to comply with that requirement.

(d) If the *Smelter Trader* does not comply with a requirement of the *Rules* in the circumstances described in clause 9.4.3(c), then the *Smelter Trader* must:

(1) give written notice to the *AER* of:

(i) the requirement of the *Rules* that has not been complied with;

(ii) details of each act or omission which partly or wholly constitutes non-compliance with that requirement of the *Rules*; and

(iii) details of the endeavours made by the *Smelter Trader* to obtain the co-operation of the *Counterparty* to enable the *Smelter Trader* to comply with the requirement of the *Rules*,

as soon as reasonably practical and in any event before the expiration of 30 *days* after the non-compliance with the requirement of the *Rules* occurs or commences; and

(2) provide the *AER* with any documents or information in the possession or control of the *Smelter Trader* which evidence the matters referred

to in clause 9.4.3(d)(1) within 14 *days* (or any longer period agreed by the *AER*) of receiving a written request from the *AER*.

(e) To avoid any doubt, if:

(1) after reviewing any written notice provided by the *Smelter Trader* under clause 9.4.3(b)(1) and any additional documents or information provided by the *Smelter Trader* under clause 9.4.3(b)(2), the *AER* forms the view that compliance with the relevant Rules Requirement would not have resulted in the *Smelter Trader* being in breach of the relevant Contractual Requirement; or

(2) after reviewing any written notice provided by the *Smelter Trader* under clause 9.4.3(d)(1) and any additional documents or information provided by the *Smelter Trader* under clause 9.4.3(d)(2), the *AER* forms the view that any of the requirements of clause 9.4.3(c) were not satisfied in respect of the subject of the notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules.*

(f) The *Smelter Trader* must give any notice or other information required to be given under this clause 9.4.3 (called in this clause "required information") in advance if it becomes aware of the potential for the circumstances giving rise to its obligation to give the required information to arise. If any required information is given under this clause 9.4.3(f), then:

(1) the required information is taken to have been given in accordance with this clause 9.4.3; and

(2) notwithstanding clause 9.4.3(f)(1), notice must be given of the non-compliance and further information provided to the *AER* upon request under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) after the non-compliance occurs or commences.

(g) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.4.3(b) or clause 9.4.3(d) (as the case may be) will be effective in relation to that non-compliance until that non-compliance ends if the relevant notice specifies that the non-compliance is continuing. The *Smelter Trader* must notify the *AER* of the end of the non-compliance no later than 30 *days* after the non-compliance ends.

(h) Clauses 9.4.3(a) and 9.4.3(c) do not affect *SEC's* obligations with respect to registration with *NEMMCO* or making payments in respect of *Participant fees*, *prudential requirements* or *settlement amounts*.

9.4.4 Report from AER

Within 30 *days* of the end of each *Quarter*, the *AER* must prepare a report for the previous *Quarter* and make it available on request to all *Registered Participants* and to those *participating jurisdictions* that participated in the *market* during the *Quarter* covered by the report. The report must include:

(a) a summary of the acts or omission of the *Smelter Trader* constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under clause 9.4.3 during the *Quarter* covered by the report; and

(b) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the *Quarter* covered by the report.

9.4.5 Cross Border Networks

(a) If:

(1) the *Victorian Minister* considers that a *transmission network* or *distribution network* situated in Victoria is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then the *Victorian Minister* and the *Minister* for that other *participating jurisdiction* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.4.5(a), then the *jurisdictional derogations* for Victoria do not apply to the extended part of the relevant *network* which is situated in Victoria.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Victoria should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Victorian Minister* consents, the *jurisdictional derogations* for Victoria are also to apply to that part of the *network* situated in the other *participating jurisdiction.*

9.5 [Deleted]

9.6 Transitional Arrangements for Chapter 4 - System Security

9.6.1 Operating Procedures (clause 4.10.1)

(a) For the purposes of clause 4.10.1(b), the System Operating Procedures as defined in the *System Code* as at 13 December 1998 (with the necessary changes to be made by *VENCorp*) are the *regional specific power system operating procedures* that apply from that date in respect of the *Victorian Transmission Network*.

(b) This clause is not to be taken as limiting in any way the operation of any other provision of the *Rules* relating to the review, updating and amendment of the *regional specific power system operating procedures*.

9.6.2 Nomenclature Standards (clause 4.12)

For the purposes of clause 4.12, the Nomenclature Standards as defined in the *System Code* as at 13 December 1998 are taken to be the *nomenclature standards* agreed between a *Network Service Provider* in respect of the *Victorian Transmission Network* or a *Victorian Distribution Network* and *AEMO* until *AEMO* and the relevant *Network Service Provider* agree otherwise under clause 4.12(a) or *AEMO* determines otherwise under clause 4.12(a).

9.7 Transitional Arrangements for Chapter 5 - Network Connection

9.7.1 [Deleted]

9.7.2 [Deleted]

9.7.3 [Deleted]

9.7.4 Regulation of Distribution Network Connection

(a) In this clause:

appropriate regulator means:

(1) if there has been no transfer of regulatory responsibility to the *AER* under a law of Victoria – the *ESC*;

(2) if there has been a transfer of regulatory responsibility to the *AER* under a law of Victoria – the *AER*.

(b) This clause 9.7.4:

(1) applies in respect of the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, and the modification of the provision of *network services* or *distribution use of system services*, in respect of, a *distribution network* (including any part of a *distribution network*) situated in Victoria; and

(2) expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

(c) Notwithstanding anything to the contrary in the *Rules*, the appropriate regulator is responsible for the regulation of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* and *distribution use of system services*, and the modification of the provision of *network services* and *distribution use of system services*, in respect of, any *distribution network* to which this clause applies.

(d) For the purposes of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* in relation to a *distribution network* to which this clause applies is to be decided by the appropriate regulator on the basis of the appropriate regulator's opinion of the fairness and reasonableness of the offer.

(e) If a dispute arises in relation to any of access to, *connection* to, the modification of a *connection* to, the *augmentation* of, the provision of *network services* or *distribution use of system services*, or the modification of the provision of *network services* or *distribution use of system services*, in respect of, any *distribution network* to which this clause applies, then that dispute must be resolved in accordance with procedures specified by the appropriate regulator and clause 8.2 does not apply to that dispute.

9.7.5 [Deleted]

9.7.6 [Deleted]

9.7.7 [Deleted]

9.8 Transitional Arrangements for Chapter 6 - Network Pricing

9.8.1 [Deleted]

9.8.2 [Deleted]

9.8.3 [Deleted]

9.8.4 Transmission Network Pricing

(a) Notwithstanding Chapter 6A, in determining *transmission service* pricing and revenues in respect of the *Victorian Transmission Network* or a part of the *Victorian Transmission Network*, the *AER* must:

(1) **[Deleted]**

(2) **[Deleted]**

(3) ensure that each *Distributor* has the benefit or burden of an equalisation adjustment for each *financial year* equal to the amount of the adjustment specified for that *Distributor* in the column headed "Equalisation Adjustment" in the following table:

TABLE	
Business	**Equalisation Adjustment ($'000) Note 2)**
TXU Electricity Ltd	(4,939)
Powercor Australia Ltd	(19,011)
AGL Electricity Limited	5,171
CitiPower Pty Ltd	5,920
United Energy Ltd	12,859

multiplied by the relevant factor determined in accordance with the following table:

TABLE	
If the *financial year* falls within the period:	**then the relevant factor is:**
1 July 2001 - 30 June 2005	.80
1 July 2005 - 30 June 2010	.60
1 July 2010 - 30 June 2015	.40
1 July 2015 - 30 June 2020	.20
thereafter	0

(b) *AEMO* must, in allocating revenue to be recovered from each *Distributor* to which it provides *prescribed TUOS services* and *prescribed common transmission services* by means of, or in connection with a *declared shared network* in each *financial year* of a *relevant regulatory period*, adjust the allocation in accordance with paragraph (a)(3).

9.8.4A [Deleted]

9.8.4B [Deleted]

9.8.4C [Deleted]

9.8.4D [Deleted]

9.8.4E [Deleted]

9.8.4F [Deleted]

9.8.4G [Deleted]

9.8.5 Distribution Network Pricing – Victorian Jurisdictional Regulator

(a) The *ESC* remains as the *Jurisdictional Regulator* for Victoria until a transfer of regulatory responsibility is made to the *AER* under a law of Victoria.

(b) This clause expires on 1 January 2011.

9.8.6 [Deleted]

9.8.7 Distribution network pricing – transitional application of former Chapter 6

(a) Subject to this clause, the former Chapter 6 continues to apply in relation to Victorian distribution networks during the transitional period.

(b) The appropriate regulator has the powers and functions of the *Jurisdictional Regulator* under the former Chapter 6 as if appointed for Victoria as the *Jurisdictional Regulator* for the purposes of clause 6.2.1(b) of the former Chapter 6.

(c) The following apply only to the extent they are consistent with clause 2.1 of the *Tariff Order*:

(1) national guidelines for *distribution service* pricing (so far as applicable to Victorian distribution networks) formulated under clause 6.2.1(c) of the former Chapter 6;

(2) guidelines and rules formulated for Victoria under clause 6.2.1(f) of the former Chapter 6,

(d) The arrangements outlined in Parts D and E of the former Chapter 6 must also be applied by the appropriate regulator subject to clause 2.1 of the *Tariff Order*.

(e) The value of sunk assets determined under clause 6.2.3(e)(5)(ii) of the former Chapter 6 must be consistent with clause 2.1 of the *Tariff Order*.

(f) In regulating *distribution service* pricing for a Victorian distribution network:

(1) the appropriate regulator must specify explicit price capping as the form of economic regulation to be applied in accordance with clause 6.2.5(b) of the former Chapter 6; and

(2) the appropriate regulator must comply with clause 2.1 of the *Tariff Order*.

(g) Neither this clause, nor the provisions of former Chapter 6 as continued in force by this clause, are relevant to a distribution determination that is to have effect after the end of the transitional period.

(h) In this clause:

appropriate regulator means:

(1) if there has been no transfer of regulatory responsibility to the *AER* under a law of Victoria – the *ESC*;

(2) if a transfer of regulatory responsibility has been made to the *AER* under a law of Victoria – the *AER*.

transitional period means the period commencing on the commencement of this clause and ending on its expiry.

Victorian distribution network means a *distribution network* situated wholly or partly in Victoria.

(i) This clause expires on the date fixed under the *National Electricity (Victoria) Act 2005* as the Victorian distribution pricing determination end date.

Note:

The date is 31 December 2010 or a later date fixed in a Victorian distribution pricing determination as the date on which the determination will cease to have effect.

9.8.8 Exclusion of AER's power to aggregate distribution systems and parts of distribution systems

The following provisions of Chapter 6 apply to *distribution systems* situated in Victoria as if, in each case, the words "unless the *AER* otherwise determines" were omitted:

(a) clause 6.2.4(c);

(b) clause 6.2.4(d);

(c) clause 6.8.2(e);

(d) clause 6.8.2(f).

Note:

The effect of these modifications is to exclude the AER's power to consolidate, under the ambit of a single distribution determination, 2 or more distribution systems, or 2 or more parts of a single distribution system that had, before the commencement of Chapter 6, been separately regulated.

9.9 Transitional Arrangements for Chapter 7 - Metering

9.9.1 Metering Installations To Which This Schedule Applies

The transitional arrangements set out in this clause 9.9 apply in relation to a *metering installation* (including a *check metering installation*) in use at *market commencement* that was required to comply with, and did comply with, the *Wholesale Metering Code* at *market commencement*.

9.9.2 [Deleted]

9.9.3 [Deleted]

9.9.4 [Deleted]

9.9.5 [Deleted]

9.9.6 [Deleted]

9.9.7 [Deleted]

9.9.8 [Deleted]

9.9.9 Periodic Energy Metering (clause 7.9.3)

(a) Subject to clause 9.9.9(b), for the purposes of clause 7.9.3, *AEMO*, the *Local Network Service Provider* and the *Market Participant* are taken to have agreed that the data referred to in clause 7.9.3 which is obtained from a *metering installation* to which this clause 9.9 applies may be collated in 15 minute intervals.

(b) This clause 9.9.9 ceases to apply in respect of a *metering installation* if *AEMO*, the relevant *Local Network Service Provider* or the relevant *Market Participant* gives notice requiring an agreement to be reached under clause 7.9.3.

9.9.10 Use of Alternate Technologies (clause 7.13)

(a) Subject to this clause 9.9.10, if at *market commencement* the *Wholesale Metering Code* provides for the use of alternate technologies or processes for the purpose of calculating the consumption of energy by a non-franchise customer (as defined in the *EI (RP) Act* and in force immediately before the commencement of section 39(a) of the Electricity Industry Act 1995 (Vic)), then the use of these technologies or processes is taken to have been agreed for the purposes of clause 7.13(a) but only to the extent to which the alternate technology or process was in use at *market commencement* in relation to that non-franchise customer.

(b) *AEMO*, the relevant *Local Network Service Provider* or the relevant *Market Participant* may give notice requiring agreement to be reached under clause 7.13(a) in respect of a technology or process referred to in clause 9.9.10(a) and clause 9.9.10(a) ceases to apply to that technology or process from the date specified in the notice.

9.9A [Deleted]

9.9B Advanced Interval Meter Roll Out

9.9B.1 Definitions

In this rule 9.9B:

AMI rollout means the rollout of advanced metering infrastructure provided for in the cost recovery order.

cost recovery order means the order dated 28 August 2007 made by the Governor in Council under section 15A and section 46D of the EI Act and published in the Victorian Government Gazette, as amended by the order dated 25 November 2008 made by the Governor in Council under section 15A and section 46D of the EI Act, and by any subsequent Order in Council under section 46D of the EI Act.

relevant *metering installation* means a *metering installation* for a *connection point* located in Victoria (other than a type 1 or type 2 *metering installation*) in respect of which the volume consumption of the customer is less than 160 MWh per annum of *energy* and which:

(a) is installed on or after 1 July 2009, unless the *Market Participant* is the *responsible person* for the *metering installation* which has been installed in accordance with the ordinary replacement cycle of the *Market Participant*; or

(b) was installed prior to 1 July 2009, unless the *Market Participant* is the *responsible person* for the *metering installation* at 1 July 2009,

and which is not a *metering installation* located at a *high voltage connection point*.

volume consumption means the volume of *energy* consumed by a customer at the relevant *connection point* calculated in accordance with Schedule 2 of the *metrology procedure*.

9.9B.2 Expiry date

This rule 9.9B expires on the earlier of:

(a) 31 December 2013; and

(b) the commencement under the *National Electricity Law* of amendments to the *Rules* that:

(1) facilitate the roll out of smart meters, advanced metering or similar metering installations of at least the equivalent scope and purpose of the AMI rollout; and

(2) provide for an orderly transfer of the regulation of relevant *metering installations* under this rule 9.9B to the regulation of *metering installations* under the *Rules*.

9.9B.3 Designation as responsible person

Despite clauses 7.2.2 and 7.2.3, the *Local Network Service Provider* is the *responsible person* for a relevant *metering installation*.

9.9B.4 Classification of relevant metering installations

(a) A relevant *metering installation* which is capable of *remote acquisition* but otherwise would be a type 5 or type 6 *metering installation*, is taken to be a type 5 or type 6 *metering installation* respectively.

(b) For the purposes of this rule 9.9B, the definition of *remote acquisition* in Chapter 10 of the *Rules* is taken to include the transmission of *metering data* from the site of the *metering point* to the *metering database* via the *metering installation database*.

9.9B.5 Cost recovery of AMI roll out

Clause 7.3.6(a) does not apply to the recovery of costs by a *Local Network Service Provider* that are associated with the provision, installation, maintenance, routine testing and inspection of relevant *metering installations*, to the extent that these costs can be recovered by the *Local Network Service Provider* in accordance with the cost recovery order.

9.9B.6 Agency data collection systems and agency metering databases

(a) If *AEMO* uses:

(1) *agency data collection systems* under clause 7.3.5(c); or

(2) *agency metering databases* to form part of the *metering database* under clause 7.9.1(b),

in respect of *metering data* from a relevant *metering installation*, the person engaged by *AEMO* under clause 7.9.1(b1) to provide the *agency data collection systems* and the *agency metering databases* must be selected by the *responsible person* for the relevant *metering installation*.

(b) Paragraph (a) applies despite anything to the contrary contained in any contractual or other arrangement between a *Market Participant* and *AEMO*.

9.9B.7 Remote acquisition of data by the responsible person

For the purposes of clause 7.9.2(a):

(a) the *responsible person* for a relevant *metering installation*, rather than *AEMO*, is responsible for the *remote acquisition* of *metering data* from a relevant *metering installation*;

(b) *AEMO* is responsible for storing the *metering data* referred to in paragraph (a) as *settlements ready data* in the *metering database*; and

(c) the *responsible person* for a relevant *metering installation* must provide the *metering data* remotely acquired under paragraph (a) to *AEMO*.

9.9B.8 Capability for remote acquisition of metering data

For the purposes of clause 7.11.1(d), a relevant *metering installation* is taken not to have the capability for *remote acquisition* of actual *metering data*.

Schedule 9A1.1 – [Deleted]

Schedule 9A1.2 – [Deleted]

Schedule 9A1.3 – [Deleted]

Schedule 9A2 – [Deleted]

Schedule 9A3 – Jurisdictional Derogations Granted to Generators

1. Interpretation of tables

In this schedule 9A3:

(a) a reference to a *Generator* listed in a table is a reference to a *Generator* listed in column 1 of the relevant table;

(b) a reference to a *generating unit* listed in a table in relation to a *Generator* is a reference to each *generating unit* listed opposite the *Generator* in the relevant table;

(c) a reference to a *Network Service Provider* in relation to a *generating unit* or a *Generator* listed in a table is to be taken to be:

(1) in the case of a *generating unit connected* to a *transmission network,* a reference to *VENCorp*; and

(2) in the case of a *generating unit connected* to a *distribution network*, a reference to the person that is the *Network Service Provider* in relation to that *distribution network*; and

(d) a reference to a modification or variation of the *Rules* or an item taken to have been agreed for the purposes of the *Rules* listed in a table applies in respect of each *generating unit* listed opposite that modification, variation or agreed item in the table.

2. Continuing effect

In this schedule 9A3, a reference to:

(a) a particular *Generator* in relation to a *generating unit*; or

(b) a particular *Network Service Provider* in relation to a *Generator*,

at any time after the 13 December 1998 is to be taken as a reference to the person or persons who is or are (or who is or are deemed to be) from time to time registered with *AEMO* as the *Generator* in respect of that *generating unit* for the purposes of the *Rules* or the *Network Service Provider* from time to time in respect of the *transmission network* or *distribution network* to which the *generating unit* is *connected*.

3. Subsequent agreement

Where, under a provision of this schedule 9A3, a particular matter is taken to have been agreed for the purposes of schedule 5.2 of the *Rules* in relation to a *generating unit*, then that provision ceases to apply in respect of that *generating*

unit if all the parties required to reach agreement in relation to that matter under the *Rules* so agree expressly in writing.

4. Additional services that may be required (clause S5.2.2 of schedule 5.2)

4.1 A *Generator* listed in Table 1 is taken to have been required by the relevant *Network Service Provider* to provide *power system* stabilising *facilities* for the *generating units* listed in Table 1.

4.2 Clause 4.1 ceases to apply in respect of a *generating unit* if the relevant *Generator*, *AEMO* and the relevant *Network Service Provider* so agree expressly in writing.

Table 1:

Generator	Generating Units
Generation Victoria	Jeeralang Power Station A, Units 1 to 4
Generation Victoria	Jeeralang Power Station B, Units 1 to 3

5. Reactive Power Capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for a *Generator* listed in Table 2 in respect of those *generating units* listed in column 2 of Table 2 by the following:

For the purpose of this clause S5.2.5.1:

'*rated active power output*' means the 'Rated MW (Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

'*nominal terminal voltage*' means the 'Nominal Terminal *Voltage*' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

(a) Each of the *synchronous generating units*, while operating at any level of *active power* output, must be capable of:

(1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a lagging power factor of 0.9; and

(2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at *rated*

active power output, *nominal terminal voltage* and a leading power factor set out in respect of that *generating unit* in column 3 of Table 2.

(b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Table 2:

Generator	Generating Units	Leading Power Factor
Loy Yang Power Ltd	Loy Yang Power Station A Units 1, 3 and 4	0.944
Loy Yang Power Ltd	Loy Yang Power Station A Unit 2	0.952
Yallourn Power Ltd	Yallourn Power Station W Units 1 and 2	0.954
Yallourn Power Ltd	Yallourn Power Station W Units 3 and 4	0.941
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8	0.989
Smelter Trader	Anglesea Power Station Unit 1	0.991
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Unit 1	(-)
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 2, 3 and 4	(-)
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Unit 5	0.979
Generation Victoria	Jeeralang A Power Station Units 1 to 4	0.978
Southern Hydro Ltd	Dartmouth Power Station Unit 1	0.972
Edison Mission Energy	Loy Yang B Power Station	0.941

Australia Limited	Units 1 and 2	

6. Generating unit response to disturbances (clauses S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2)

6.1 A *Generator* listed in Table 3.1 is, in respect of a *generating unit* listed in column 2 of Table 3.1, taken to comply with the requirements of clause S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2 of the *Rules* if the *generating unit* complies with clause 6.3 below.

6.2 A *Generator* listed in Table 3.2 is, in respect of a *generating unit* listed in column 2 of Table 3.2, taken to comply with the requirements of clause S5.2.5.3, S5.2.5.4 and S5.2.5.5 of schedule 5.2 of the *Rules* if the *generating unit* complies with clause 6.4 below.

6.3 The *generating unit* must be able to maintain continuous uninterrupted operation in the event of:

(a) *disconnection* of the single largest *generating unit* on the *power system* provided that system *frequency* does not fall below 49.5 Hz and recovers to above 49.9 Hz within four minutes; and

(b) a two-phase to ground line fault adjacent to the power station switch yard cleared in primary protection time.

6.4 The *generating unit* must be able to maintain continuous uninterrupted operation in the event of *disconnection* of the single largest *generating unit* on the *power system* provided that system *frequency* does not fall below 49.5 Hz and recovers to above 49.9 Hz within four minutes.

Table 3.1:

Generator	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Generation Victoria	Newport D Power Station Unit 1

Table 3.2:

Generator	Generating Units
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5

Generation Victoria	Jeeralang A Power Station Units 1 to 4
Generation Victoria	Jeeralang B Power Station Units 1 to 3
Southern Hydro Ltd	Dartmouth Power Station Unit 1 Eildon Power Station Units 1 and 2 Clover Power Station Units 1 and 2 McKay Creek Power Station Units 1 to 6 West Kiewa Power Station Units 1 to 4
Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2

7. Partial load rejection (clause S5.2.5.7 of schedule 5.2)

7.1 For a *Generator* listed in Table 4.1, in respect of those *generating units* listed in column 2 of Table 4.1, clause S5.2.5.7(c) of schedule 5.2 of the *Rules* is modified by the addition of the following after "*nameplate rating*":

"and system *frequency* remains within 47 Hz to 52 Hz provided that system *frequency* returns to:

(i) within the range 48.5 Hz to 50.5 Hz within 60 seconds; and

(ii) within the range 49.5 Hz to 50.5 Hz within 60 minutes,"

Table 4.1:

Power Station	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Generation Victoria	Newport D Power Station Unit 1
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5
Generation Victoria	Jeeralang A Power Station Units 1 to 4 Jeeralang B Power Station Units 1 to 3

Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2

7.2 For a *Generator* listed in Table 4.2, the application of clause S5.2.5.4(a) of schedule 5.2 of the *Rules* to those *generating units* listed in column 2 of Table 4.2 is varied by replacing "30%" with "25%".

Table 4.2

Generator	Generating Units
Loy Yang Power Ltd	Loy Yang A Power Station Units 1 to 4
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation	Morwell Power Station Units 1 to 5
Edison Mission Energy Australia Limited	Loy Yang B Power Station Units 1 and 2

7.3 For a *Generator* listed in Table 4.3, in respect of a *generating units* listed in column 2 of Table 4.3, clause S5.2.5.4(a) of schedule 5.2 of the *Rules* is modified by the addition of the following after "*nameplate rating"*: "and allowing that the *generating unit's* output may be manually adjusted to avoid rough running bands following automatic control action".

Table 4.3:

Generator	Generating Units
Southern Hydro Ltd	Dartmouth Power Station Unit 1
	Eildon Power Station Units 1 and 2
	Clover Power Station Units 1 and 2
	West Kiewa Power Station Units 1 to 4

8. [Deleted]

9. [Deleted]

10. Protection systems that impact on system security (clause S5.2.5.9 of schedule 5.2)

For the purposes of clause S5.2.5.9 of schedule 5.2 of the *Rules*, in the case of a *Generator* listed in Table 7, in respect of those *generating units* listed in column 2 of Table 7:

(a) the relevant *Network Service Provider* is taken to have agreed that the *Generator* is to provide protections for those *generating units* to perform the following functions except where indicated otherwise in column 3 of Table 7:

(1) protection for faults on the line and connections to the unit transformer of the *generating unit* and *transmission network* or *distribution network* (as the case may be);

(2) protection for faults within the generator transformer of the *generating unit*;

(3) protection for faults within the *generating unit*;

(4) protection for excitation system faults;

(5) protection for faults in the phase isolated bus or its terminations between the *generating unit* and the generator transformer of the *generating unit*; and

(6) protection for faults within the generator transformer of the *generating unit*;

(b) where indicated in column 3 of Table 7, the protection system is not required to be duplicated; and

(c) the *Generator* must ensure that only settings approved by the relevant *Network Service Provider* in writing are applied on the *protection systems* of the *generating unit* and must not change any of those settings without the prior written approval of the relevant *Network Service Provider*.

Table 7:

Power Station	Generating Units	Derogations
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8	Not required to duplicate protections for excitation system faults.
Generation	Jeeralang A Power	Not required to duplicate protections

Victoria	Station Units 1 to 4	for faults in the unit transformers of the *generating unit*.
Generation Victoria	Jeeralang B Power Station Units 1 to 3	Not required to duplicate protection for excitation system faults or for faults in the unit transformers of the *generating unit*.
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5	Not required to duplicate any protections. Not required to provide protection for faults within transformers (and connections thereto) which do not form part of the power station.

Power Station	Generating Units	Derogations
Southern Hydro Ltd	Eildon Power Station Units 1 and 2	Not required to duplicate protections for faults within the unit transformers of the *generating unit*.
Southern Hydro Ltd	Clover Power Station Units 1 and 2	Not required to duplicate any of the protections.

11. Asynchronous operation (clause S5.2.5.10 of schedule 5.2)

A *Generator* listed in Table 8 is not required to have protection to prevent pole slipping or asynchronous operation in respect of those *generating units* listed in column 2 of Table 8.

Table 8:

Generator	Generation units
Southern Hydro Ltd	Clover Power Station Units 1 and 2

12. [Deleted]

13. Governor Systems (load control) (clause S5.2.5.11 of schedule 5.2)

For the purposes of clause S5.2.5.11 of schedule 5.2 of the *Rules*, a *Generator* listed in Table 10 is not required to include *facilities* for *load* control for those *generating units* listed in column 2 of Table 10.

Table 10:

Generator	Generating Unit
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Smelter Trader	Anglesea Power Station Unit 1

14. Governor control equipment (clause S5.2.5.11 of schedule 5.2)

14.1 For the purposes of clause S5.2.5.11 of schedule 5.2 of the *Rules*, a *Generator* listed in Tables 11.1 to 11.4 is taken to have agreed the overall response requirements set out in clause 14.2 below with the relevant *Network Service Provider* in respect of those *generating units* listed in column 2 of Tables 11.1 to 11.4.

14.2 For a *Generator* listed in Tables 11.2 to 11.4, the overall response of a *generating unit* listed in the relevant Table to system *frequency* excursions must achieve an increase in the *generating unit's* generated output of 5% for a 0.1 Hz reduction in system *frequency* and a reduction in the *generating unit's* generated output of 5% for a 0.1 Hz increase in system *frequency*, subject to the following:

(a) for those *generating units* listed in Table 11.1, this clause only applies when operating in speed control mode;

(b) for those *generating units* listed in Table 11.2, the *generating unit* is only required to achieve a change in the *generating unit's* generated output in accordance with the requirements of British Standard BS EN 60045-1: 1993 with a droop setting of 4%;

(c) for those *generating units* listed in Table 11.3, the *generating unit* is only required to achieve a change in the *generating unit's* generated output in accordance with the requirements of the relevant British Standard for governors for hydro-electric generating units with an overall droop setting of 4% and a deadband of not more than 0.1 Hz; and

(d) for those *generating units* listed in Table 11.4, the requirements of this clause are subject to requirements for steam pressure control for briquette plant operation.

Table 11.1:

Generator	Generating Unit
Generation Victoria	Jeeralang A Power Station Units 1 to 4
Generation Victoria	Jeeralang B Power Station Units 1 to 3

Table 11.2:

Generator	Generating Unit
Yallourn Energy Ltd	Yallourn W Power Station Units 1 to 4
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 4

Table 11.3:

Generator	Generating Unit

Southern Hydro Ltd	Eildon Power Station Units 1 and 2 McKay Power Station Units 1 to 6 West Kiewa Power Stations Units 1 to 4
Southern Hydro Ltd	Clover Power Station Units 1 and 2

Table 11.4:

Generator	Generating Unit
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 2 to 4

15. Reactive current compensation (clause S5.2.5.13 schedule 5.2)

For the purposes of clause S5.2.5.13(b)(3)(x) of schedule 5.2 of the *Rules*, a *Generator* listed in Table 12 is taken to have agreed with the relevant *Network Service Provider* that in respect of those *generating units* listed in column 2 of Table 12, the *excitation control system* of the *generating unit* need not be capable of providing reactive current compensation settable for boost or droop.

Table 12:

Generator	Generating Units
Yallourn Power Ltd	Yallourn Power Station W Units 1 to 4

16. Excitation Control System (clause S5.2.5.13 of schedule 5.2)

For the purposes of clause S5.2.5.13(b) of schedule 5.2 of the *Rules*, a *Generator* listed in Table 13 is not required to provide *power system* stabilising action in relation to those *generating units* listed in column 2 of Table 13.

Table 13:

Power Station	Generating Units
Energy Brix Australia Corporation Pty Ltd	Morwell Power Station Units 1 to 5
Hazelwood Power Corporation Ltd	Hazelwood Power Station Units 1 to 8
Smelter Trader	Anglesea Power Station Unit 1

Part B – Jurisdictional Derogations for New South Wales

9.10 [Deleted]

9.11 Definitions

9.11.1 Definitions used in this Part B

For the purposes of this Part B:

(a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and

(b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
EnergyAustralia	The energy distributor known as "EnergyAustralia" and established under the Energy Services Corporations Act 1995 (NSW).
ES Act	Electricity Supply Act 1995 (NSW).
IPART	The New South Wales Independent Pricing and Regulatory Tribunal established under the *IPART Act*.
IPART Act	Independent Pricing and Regulatory Tribunal Act 1992 (NSW).
Minister	The Minister administering the *ES Act* from time to time.
Mount Piper Cross Border Leases	The various agreements, documents and deeds relating to the leasing, ownership and operation of the *generating systems* comprising the *Mount Piper Power Station* entered into at the request of, or for the benefit of, one or more of Delta Electricity, New South Wales Treasury Corporation and the State of New South Wales and whether or not any of Delta Electricity, New South Wales Treasury Corporation or the State of New South Wales is a party to those agreements, documents and deeds.

Column 1	Column 2
Mount Piper Participants	The parties to the *Mount Piper Cross Border Leases* from time to time.
Mount Piper Power Station	The *power station* known as the "Mount Piper Power Station" located at Portland, New South Wales.
Mount Piper Trader	Delta Electricity or such other of the *Mount Piper Participants* from time to time which is operating the *Mount Piper Power Station*.
NSW Electricity Market Code	The code entitled NSW State Electricity Market Code, as in force immediately before 13 December 1998.
Power Supply Agreements	Each of the following agreements in their form as at 1 July 1996: (a) Power Supply Agreement dated 23 January 1991 between Macquarie Generation, Tomago Aluminium Company Pty Ltd and others; (b) the contract known as the **BHP Port Kembla Slab and Plate Products Contract** between Delta Electricity (formerly known as First State Power) and BHP Steel (AIS) Pty Ltd ACN 000 019 625 (formerly known as Australian Iron & Steel Ltd), being the contract that arises from the two agreements dated 24 May 1955, the agreement dated 27 November 1958 and the agreement dated 1 December 1969 (as amended and supplemented before 1 July 1996); (c) the contract known as the **BHP Newcastle Rod and Bar Products Contract** between Delta Electricity (formerly known as First State Power) and The Broken Hill Proprietary Company Ltd ACN 004 028 077, being the contract that arises from the agreement dated 13 August 1959 (as amended and supplemented before 1 July 1996).

Column 1	Column 2
Power Trader	Each of Delta Electricity (formerly known as First State Power), Macquarie Generation and such other person as may be nominated by the *Minister* to perform any obligation under a *Power Supply Agreement*.
TransGrid	The energy transmission operator known as "TransGrid" and established under the Energy Services Corporations Act 1995 (NSW).

9.12 Transitional Arrangements for Chapter 2 - Generators, Registered Participants, Registration and Cross Border Networks

9.12.1 Registration as a Generator

(a) For the purposes of the *Rules*:

(1) **[Deleted]**

(2) **[Deleted]**

(3) *Mount Piper Trader* is deemed to be the person that must register as a *Generator* in relation to the *generating systems* forming part of the *Mount Piper Power Station*; and

(4) the *Mount Piper Participants* (other than the *Mount Piper Trader*) are not to, and are not to be taken to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating systems* forming part of *the Mount Piper Power Station*.

(b) **[Deleted]**

(c) Clause 9.12.1(a)(3) and (4) ceases to have effect upon the expiry or earlier termination of the last of the *Mount Piper Cross Border Leases.*

9.12.2 Customers

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of New South Wales for classification of a *connection point* of that person if that person is the holder of a retail supplier's licence issued under the *ES Act* or is a wholesale customer (as defined in the *ES Act*).

9.12.3 Power Traders

(a) Each *Power Trader* for the purpose of supplying electricity under a *Power Supply Agreement* (the "*Power Supply Agreement*") is deemed to be and at all relevant times to have been (and must register with *NEMMCO* as) a *Market Customer* in relation to electricity supplied under the *Power Supply Agreement*, which electricity is deemed to be and at all relevant times to have been a *market load*.

(b) If complying with a requirement of the *Rules* ("the Rules Requirement") would result in a *Power Trader* being in breach of a provision of a *Power Supply Agreement* to which it is a party ("the Contractual Requirement"), the *Power Trader* is not required to comply with the Rules Requirement to the extent of the inconsistency between the Rules Requirement and the Contractual Requirement.

(c) If a *Power Trader* does not comply with a Rules Requirement in the circumstances described in clause 9.12.3(b), then the *Power Trader* must:

(1) give written notice to the *AER* of:

(i) the Rules Requirement which has not been complied with;

(ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and

(iii) details of each Contractual Requirement which is said by the *Power Trader* to be inconsistent with the Rules Requirement,

by no later than 7 *days* after the non-compliance with the Rules Requirement occurs or commences; and

(2) provide the *AER* with any documents or information in the possession or control of the *Power Trader* which evidence the matters referred to in clause 9.12.3(c)(l), within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

(d) If:

(1) a *Power Trader* requires the co-operation of any other party to a *Power Supply Agreement* (a "counterparty") to comply with a requirement of the *Rules* (the "Rules Requirement");

(2) the *Power Trader* has used all reasonable endeavours to obtain the counterparty's co-operation in order to enable the *Power Trader* to comply with the Rules Requirement; and

(3) under the *Power Supply Agreement* the *Power Trader* has no ability to require the counterparty to so co-operate with the *Power Trader* and the counterparty is not in breach of the *Power Supply Agreement* by refusing to so co-operate with the *Power Trader*,

then the *Power Trader* is not required to comply with that Rules Requirement.

(e) If a *Power Trader* does not comply with a Rules Requirement in the circumstances described in clause 9.12.3(d), then the *Power Trader* must:

(1) give written notice to the *AER* of:

(i) the Rules Requirement which has not been complied with;

(ii) details of each act or omission which partly or wholly constitutes non-compliance with that Rules Requirement; and

(iii) details of the endeavours made by the *Power Trader* to obtain the counterparty's co-operation to enable the *Power Trader* to comply with the Rules Requirement,

by no later than 7 *days* after the non-compliance with the Rules Requirement occurs or commences; and

(2) provide the *AER* with any documents or information in the possession or control of the *Power Trader* which evidence the matters referred to in clause 9.12.3(e)(1), within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

(f) To avoid any doubt, if:

(1) after reviewing any written notice provided by a *Power Trader* under clause 9.12.3(c)(1) and any additional documents or information provided by the *Power Trader* under clause 9.12.3(c)(2), the *AER* forms the view that compliance with the relevant Rules Requirement would not have resulted in the *Power Trader* being in breach of the relevant Contractual Requirement; or

(2) after reviewing any written notice provided by a *Power Trader* under clause 9.12.3(e)(1) (the "Notice") and any additional documents or information provided by the *Power Trader* under clause 9.12.3(e)(2), the *AER* forms the view that any of the requirements of clause 9.12.3(d) were not in fact satisfied in respect of the subject matter of the Notice,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

(g) A *Power Trader* may provide notice and information to the *AER* as required in clauses 9.12.3(c) or (e), as the case requires, in advance if it becomes aware of the potential for the circumstances described in clauses 9.12.3(b) or (d) to arise. Such notice and information will be deemed to have been given in accordance with clauses 9.12.3(c) or (e), as the case requires.

(h) Notwithstanding the provision of notice and information in advance in accordance with clause 9.12.3(g), the *Power Trader* must give notice of non-compliance with the *Rules* and provide such other documents or information as required in accordance with clauses 9.12.3(c) or (e), as the case requires, after such non-compliance has occurred or commenced.

(i) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clauses 9.12.3(c) or (e), as the case requires, will be effective in relation to that non-compliance until that non-compliance ends provided that:

(1) the notice specifies that the non-compliance is continuing; and

(2) the *Power Trader* notifies the *AER* of the end of the non-compliance no later than 7 *days* after the non-compliance ends.

(j) Clauses 9.12.3(b) and (d) do not affect a *Power Trader's* obligation with respect to registration with *NEMMCO* or making payments in respect of:

(1) *Participant fees*;

(2) *prudential requirements*; or

(3) *settlement amounts*.

(k) Within 30 *days* of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available on request to all *Registered Participants* and to the *participating jurisdictions* which participated in the *market* during the quarter covered by the report. The quarterly report must include:

(1) a summary of the acts or omissions of *Power Traders* constituting non-compliance with any Rules Requirement, as disclosed in written notices received by the *AER* under clauses 9.12.3(c) or (e) during the quarter covered by the report; and

(2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation of the *market* during the quarter covered by the report.

(l) This clause 9.12.3 ceases to have effect in respect of a *Power Supply Agreement* upon termination of that agreement.

9.12.4 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in New South Wales is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.12.4(a), then the *jurisdictional derogations* for New South Wales do not apply to the extended part of the relevant *network* which is situated in New South Wales.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for New South Wales should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of New South Wales consents, the *jurisdictional derogations* for New South Wales are also to apply to that part of the *network* situated in the other *participating jurisdiction.*

9.13 [Deleted]

9.14 Transitional Arrangements for Chapter 4 - System Security

9.14.1 Power System Operating Procedures

For the purposes of clause 4.10.1, the *regional specific power system operating procedures* that apply in respect of operations on the *network* situated in New South Wales are, with the inclusion of any operating procedures set out in such operating manuals and other documents as are specified by *TransGrid* and provided to *NEMMCO*, the *regional specific power system operating procedures* reviewed and updated under clause 4.10.2(e).

9.15 Transitional Arrangements for Chapter 5 - Network Connection

9.15.1 [Deleted]

9.15.2 Disputes Relating to a NSW Distribution Network

(a) If:

(1) a dispute arises between or involving two or more *Registered Participants* in respect of:

(i) access to;

(ii) *connection* to;

(iii) use of; or

(iv) *distribution network service* pricing for,

a *distribution network* situated in New South Wales; and

(2) **[Deleted]**

(3) the dispute is not resolved by agreement of the parties in dispute within 10 *business days* (or such other period as the parties agree to be an acceptable period) after the dispute first arose,

then the matter in dispute must be referred by the parties in dispute to the appropriate regulator to act as the *Adviser*. If the appropriate regulator:

(4) thinks it appropriate for a dispute; and

(5) does not reasonably consider that acting as the *Adviser* and the *dispute resolution panel* will prejudice the appropriate regulator's ability to implement a fair and efficient dispute resolution process,

IPART may also act as the *dispute resolution panel* under the dispute resolution procedures set out in Chapter 8, provided that, if *IPART* elects to act as both the *Adviser* and the *DRP*, it must make such arrangements as are necessary to ensure that, in carrying out its functions as the *DRP*, no party may be adversely affected by *IPART* having previously acted as the *Adviser*. If *IPART* is unable or unwilling to make such arrangements, then it must appoint a *DRP* in accordance with the *Adviser*'s functions in Chapter 8.

(b) In this clause:

appropriate regulator means:

(1) if the NSW Minister has made no transfer of regulatory responsibility to the *AER* under clause 11.14.4 – *IPART*;

(2) if the NSW Minister has made a transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the *AER*.

(c) This clause expires on 1 July 2009.

9.16 Transitional Arrangements for Chapter 6 - Network Pricing

9.16.1 [Deleted]

9.16.2 [Deleted]

9.16.3 Jurisdictional Regulator

(a) *IPART* remains as the *Jurisdictional Regulator* for New South Wales until the NSW Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.

(b) However, the definitions of *local area* and *Local Network Service Provider* are to be read as if the reference to the authority responsible for administering the jurisdictional electricity legislation in the relevant participating jurisdiction were replaced by a reference to the laws of the State of New South Wales.

(c) Paragraph (a) expires on 1 July 2009.

9.16.4 Deemed Regulated Interconnector

For the purposes of the *Rules*, the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the *power system* in New South Wales, is deemed to be a *regulated interconnector*.

9.16.5 Revenue Cap

(a) For the purposes of clause 6.2.4, in respect of the regulation of *transmission service* pricing in New South Wales, the *revenue cap* for the *financial year* commencing on 1 July 2004 (the "Period") will be deemed to be:

(1) for *TransGrid*, the *maximum allowed revenue* for the Period in the ACCC's "Draft Decision NSW and ACT Transmission Network Revenue Caps – TransGrid 2004/05-2008/09" dated 28 April 2004 (the "Draft TransGrid Revenue Cap Decision"); and

(2) for *EnergyAustralia*, the *maximum allowed revenue* for the Period in the ACCC's "Draft Decision NSW and ACT Transmission Network Revenue Cap – EnergyAustralia 2004/05-2008/09" dated 28 April 2004 (the "Draft EA Revenue Cap Decision").

(b) For the purposes of clauses 6.3 to 6.4, 6.5.1 to 6.5.6, 6.7.3, 6.7.4 and 6.8 to 6.9, the prices applying in the Period for *prescribed transmission services*

provided by means of the *transmission networks* and associated *connection assets* located in New South Wales applying to individual *transmission network connection points* located in New South Wales during the Period, must be determined on the following basis:

(1) the *aggregate annual revenue requirement* for *TransGrid* will be the *maximum allowed revenue* for the Period specified in the Draft TransGrid Revenue Cap Decision; and

(2) the *aggregate annual revenue requirement* for *EnergyAustralia* will be the *maximum allowed revenue* for the Period specified in the Draft EA Revenue Cap Decision.

(c) For the purposes of applying clause 6.4.3C for the *financial year* commencing on 1 July 2005, *EnergyAustralia* and *TransGrid* each must subtract the *maximum allowed revenue* determined in accordance with clause 9.16.5(a) from:

(1) in the case of *TransGrid*, the "Maximum Allowed Revenue" for the Period in any final decision which is expressed to apply to the Period; and

(2) in the case of *EnergyAustralia*, the "Maximum Allowed Revenue" for the Period in any final decision which is expressed to apply to the Period,

and then:

(3) if the result of that subtraction is an amount less than zero then, in addition to the other amounts mentioned in clause 6.4.3C(b), the absolute value of that amount must be deducted from the portion of the *aggregate annual revenue requirement* referred to in clause 6.4.3C(b); and

(4) if the result of that subtraction is an amount greater than zero then, in addition to the other amounts mentioned in clause 6.4.3C(c), that amount must be added to the portion of the *aggregate annual revenue requirement* referred to in clause 6.4.3C(c),

prior to the application of interest in accordance with clause 6.4.3C(b) or 6.4.3C(c) as the case may be.

(d) For the purposes of clause 6.2.4, in respect of the regulation of *transmission service* pricing in New South Wales, a *revenue cap* applying to a *Transmission Network Service Provider* determined by the ACCC for the period commencing on 1 July 2004 until the end of 30 June 2009 will be deemed to be for a period of five years notwithstanding that such *revenue*

cap did not take effect until after 1 July 2004 or that such *revenue cap* was determined by the *ACCC* after 1 July 2004.

9.17 Transitional Arrangements for Chapter 7 - Metering

9.17.1 Extent of Derogations

(a) **[Deleted]**

(b) **[Deleted]**

(c) The transitional arrangements set out in clauses 9.17.2 and 9.17.4 apply to all *metering installations* (including *check metering installations*) that were in use at 13 December 1998 and that were required to comply with (and did comply with) the *NSW Electricity Market Code* as at 13 December 1998.

9.17.2 Initial Registration (clause 7.1.2)

(a) Subject to clause 9.17.2(b), if:

(1) a *metering installation* to which this clause 9.17 applies was registered with *TransGrid* under the *NSW Electricity Market Code* as at 13 December 1998; and

(2) the details registered with *TransGrid* were provided to *NEMMCO* on or before 13 December 1998,

then the *metering installation* is taken to be registered with *AEMO* for the purposes of clause 7.1.2(a).

(b) The *responsible person* in respect of a *metering installation* which is taken to be registered under clause 9.17.2(a) must ensure that the requirements for registration of a *metering installation* under Chapter 7 are met by 13 December 1999 or such other time as may be agreed with *AEMO*.

9.17.3 Amendments to Schedule 9G1

The transitional metering provisions set out in schedule 9G1, amended as follows, apply to New South Wales in respect of Chapter 7:

(a) **[Deleted]**

(b) **[Deleted]**

(c) If, in respect of a *metering installation* commissioned before 13 December 1998, the *responsible person* has obtained an exemption prior to 13 December 1998 from *TransGrid* pursuant to clause 2.2(c) of Schedule 7.2 of the *NSW Electricity Market Code*, then that exemption is deemed to

continue as an exemption granted by *AEMO* pursuant to clause S7.2.2(c) of schedule 7.2 of the *Rules*.

(d) **[Deleted]**

(e) **[Deleted]**

(f) **[Deleted]**

9.17.4 Compliance with AS/NZ ISO 9002 (clause S7.4.3(f) of schedule 7.4)

Category 1A, 2A and 3A *Metering Providers* must be able to exhibit the requirements of clause S7.4.3(f)(1) of schedule 7.4 of the *Rules* by the date which is 2 years after the date the *Metering Provider* applied to be registered as a *Metering Provider* with *NEMMCO*.

9.17A [Deleted]

9.18 [Deleted]

Part C – Jurisdictional Derogations for the Australian Capital Territory

9.19 [Deleted]

9.20 Definitions and Transitional Arrangements for Cross-Border Networks

9.20.1 Definitions

For the purposes of this Part C:

(a) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and

(b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	**Column 2**
Minister	The Minister from time to time administering the Utilities Act 2000 (ACT) or other applicable ACT legislation.

9.20.2 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in the Australian Capital Territory is a continuation of a *network* situated in New South Wales and should be considered to be a part of the New South Wales *network*; and

(2) the *Minister* for New South Wales consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in New South Wales and the *Rules* including any relevant *jurisdictional derogations* for New South Wales are deemed to apply to the *network* as if the *network* were located entirely within New South Wales.

(b) If a nomination is made under clause 9.20.2(a), then the *jurisdictional derogations* for the Australian Capital Territory do not apply to the extended part of the relevant *network* which is situated in the Australian Capital Territory.

(c) If the *Minister* for New South Wales nominates that the *jurisdictional derogations* for the Australian Capital Territory should apply to a *network* part of which is situated in New South Wales, then if the *Minister* for the Australian Capital Territory consents, the *jurisdictional derogations* for the Australian Capital Territory are also to apply to that part of the *network* situated in New South Wales.

9.21 [Deleted]

9.22 [Deleted]

9.23 Transitional Arrangements for Chapter 6 - Network Pricing

9.23.1 [Deleted]

9.23.2 [Deleted]

9.23.3 [Deleted

9.23.4 [Deleted]

9.24 Transitional Arrangements

9.24.1 Chapter 7 - Metering

The transitional metering provisions set out in schedule 9G1 apply to the Australian Capital Territory in respect of Chapter 7.

9.24.2 [Deleted]

9.24A [Deleted]

Part D – Jurisdictional Derogations for South Australia

9.25 Definitions

9.25.1 [Deleted]

9.25.2 Definitions

(a) For the purposes of this Part D, a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the table in clause 9.25.2(b).

(b) For the purposes of this Part D, a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	**Column 2**
customer	A customer as defined in the *Electricity Act*
Distribution Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the Public Corporations (Distribution Lessor Corporation) Regulations 1999 and known as "Distribution Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Distribution Lessor Corporation under a *South Australian Distribution Network Lease*, by way of succession, assignment, novation, ministerial direction, or otherwise.
Electricity Act	*Electricity Act* 1996 (SA).
ETSA Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "ETSA Corporation" and includes its successors and assigns
ETSA Power	The statutory corporation established as a subsidiary of *ETSA Corporation* by the Public Corporations (ETSA Power) Regulations 1995, and includes its successors and assigns.

Column 1	Column 2
ETSA Transmission Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "ETSA Transmission Corporation" and includes any party which replaces or assumes rights or obligations of ETSA Transmission Corporation as a party to the *South Australian Transmission Lease*, by way of succession, assignment, novation, ministerial direction, or otherwise.
Generation Lessor Corporation	A subsidiary of the Treasurer of the State of South Australia established by the Public Corporations (Generation Lessor Corporation) Regulations 1999 and known as "Generation Lessor Corporation" and includes any entity which replaces or assumes rights or obligations of Generation Lessor Corporation under the *South Australian Generation Leases*, by way of succession, assignment, novation, ministerial direction, or otherwise.
Northern Power Station agreements	The various agreements, documents and deeds in their form as at 1 July 1996 relating to the leasing and ownership of the *generating system* and associated *generating units* comprising the Northern Power Station entered into by *ETSA Corporation* and now under the control of *SA Generation Corporation*
Northern Power Station Participants	The parties to the *Northern Power Station agreements* other than *SA Generation Corporation.*
Osborne agreement	The Agreement dated 4 June 1996 (in its form as at 1 July 1996) between *ETSA Corporation* and Osborne Cogeneration Pty Ltd and known as the "Osborne Power Purchase Agreement".
South Australian Distribution Network Lease	Any lease with respect to the electricity *distribution network*, plant and equipment owned by *Distribution Lessor Corporation* from time to time.
SA Generation Corporation	The statutory corporation established pursuant to the Electricity Corporations Act 1994 and known as "SA Generation Corporation" (trading as Optima Energy), and includes its successors and assigns
South Australian Generation Leases	Leases with respect to electricity *generating systems* and associated *generating units* owned by *Generation Lessor Corporation* from time to time.

Column 1	Column 2
South Australian network	A *network* situated in South Australia or deemed to be situated in South Australia by operation of clause 9.4.5.
South Australian Transmission Lease	The various agreements, documents and deeds in their form as at 31 August 1998 relating to the leasing and ownership of the *transmission network* in South Australia entered into by *ETSA Transmission Corporation.*
South Australian Transmission Lease Participants	The parties to the *South Australian Transmission Lease* other than *ETSA Transmission Corporation.*
South Australian Transmission Network Sub Sub Sub Lease	Any sub sub sub-lease (together with any lease or agreement to lease extending beyond the termination date of such sub sub sub lease) with respect to the electricity *transmission network*, plant and equipment of which *ETSA Transmission Corporation* is sub sub sub-lessor from time to time.

(c) **[Deleted]**

(d) For the purposes of the *Rules* "*applicable regulatory instruments*" includes the following South Australian instruments in relation only to the regulation of *networks*, *network services* and retail sales of electricity in South Australia:

(i) the *Electricity Act*;

(ii) all codes and regulations made and licences issued under the *Electricity Act*;

(iii) all regulatory instruments applicable under those licences;

(iv) the Electricity Pricing Order made under section 35B of the *Electricity Act*;

(v) the *Electricity Corporations (Restructuring and Disposal) Act* 1999;

(vi) the *Essential Services Commission Act* 2002; and

(vii) all regulations and determinations made under the *Essential Services Commission Act* 2002.

9.26 Transitional Arrangements for Chapter 2 - Registered Participants, Registration And Cross Border Networks

9.26.1 Registration as a Generator

For the purposes of the *Rules*:

(a) *ETSA Power* and any one person that replaces or assumes rights or obligations of *ETSA Power* as party to the *Osborne agreement*, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person who must register as the *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Osborne agreement*;

(b) Osborne Cogeneration Pty Ltd is not to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Osborne agreement*;

(c) *SA Generation Corporation* and any person that replaces or assumes rights or obligations of *SA Generation Corporation* as party to the *Northern Power Station agreements*, by way of succession, assignment, novation, ministerial direction, or otherwise, is deemed to be, and at all relevant times to have been, the person that must register as the *Generator* (unless otherwise exempt) in relation to the *generating system* and associated *generating units* which are the subject of the *Northern Power Station agreements*;

(d) the *Northern Power Station Participants* are not to, and are not to be taken to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* which are the subject of the *Northern Power Station agreements*;

(e) clauses 9.26.1(a) and (b) will cease to have effect on the termination of *the Osborne agreement*;

(f) clauses 9.26.1(c) and (d) will cease to have effect on the termination of the last of the *Northern Power Station agreements*;

(g) *Generation Lessor Corporation* is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating system* and associated *generating units* in South Australia which are the subject of the *South Australian Generation Leases*; and

(h) clause 9.26.1(g) will apply in respect of each *South Australian Generation Lease* from the time that lease becomes effective and will cease to have effect on the termination of that lease (or the termination of any renewal of that lease).

9.26.2 Registration as a Customer

For the purposes of clause 2.3.1(e), a person may classify its electricity purchased at a *connection point* in South Australia if the person is:

(a) licensed to retail electricity under the *Electricity Act* and regulations; or

(b) a *customer* pursuant to the *Electricity Act* and regulations.

9.26.3 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in South Australia is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.26.3(a), then the *jurisdictional derogations* for South Australia do not apply to the extended part of the relevant *network* which is situated in South Australia.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for South Australia should apply to a *network* part of which is situated in that other *participating jurisdiction*, then if the *Minister* in respect of South Australia consents, the *jurisdictional derogations* for South Australia are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.26.4 [Deleted]

9.26.5 Registration as a Network Service Provider

For the purpose of the *Rules*:

(a) the *South Australian Transmission Lease Participants* are not obliged to, and are taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the *South Australian Transmission Lease*.

(b) Clause 9.26.5(a) will cease to have effect on the termination, extension or variation of the *South Australian Transmission Lease*.

(c) *Distribution Lessor Corporation* is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *distribution network* in South Australia which is the subject of the *South Australian Distribution Network Lease*.

(d) *ETSA Transmission Corporation* (notwithstanding that it is the owner and sub sub sub lessor of the *transmission network* in South Australia) is not obliged to, and is not to be taken to be entitled to, and is to be taken to have been exempted from the requirement to, register as a *Network Service Provider* in relation to the *transmission network* in South Australia which is the subject of the *South Australian Transmission Network Sub Sub Sub Lease*.

(e) Clause 9.26.5(c) will have effect for the period of each *South Australian Distribution Network Lease* (including the period of any renewal).

(f) Clause 9.26.5(d) will have effect for the period of each *South Australian Transmission Network Sub Sub Sub Lease* (including the period of any renewal).

9.27 [Deleted]

9.28 Transitional Arrangements for Chapter 5 - Network Connection

9.28.1 Application of clause 5.2

For the purposes of clause 5.2:

(a) for *facilities* existing at *market commencement*, *Registered Participant* exemptions may be sought from *NEMMCO* in accordance with the *Rules* for particular *facilities* where material departures from the *Rules* are reasonably expected. Any necessity to alter the existing arrangements for *facilities* is to be negotiated and agreed by affected *Registered Participants*;

(b) South Australia reserves the right to seek further exemptions from *NEMMCO* in accordance with the *Rules* for existing *power stations* if they are unable to meet the requirements of the *Rules* and those exemptions will not result in system damage; and

(c) **[Deleted]**

(d) **[Deleted]**

(e) the provisions in this clause 9.28 apply until there are corresponding changes to the *Rules* which deliver equivalent outcomes to the satisfaction of the South Australian Government.

9.28.2 Regulation of Distribution Network Connection

(a) Notwithstanding anything to the contrary in the *Rules*, the *Jurisdictional Regulator* appointed for South Australia is responsible for the regulation of access in respect of any *distribution network* situated in South Australia concerning:

(i) *connection;*

(ii) modification of a *connection;*

(iii) *augmentation;*

(iv) provision of *network services* and *distribution use of system services;*

(v) modification of the provision of *network services* and *distribution use of system services*.

(b) For the purpose of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* in relation to a *distribution network* situated in South Australia is to be decided by the *Jurisdictional Regulator* on the basis of the opinion of the *Jurisdictional Regulator* as to the fairness and reasonableness of the offer.

(c) If:

(1) a dispute arises between or involving two or more *Registered Participants* in respect of:

(i) access to;

(ii) *connection* to;

(iii) use of; or

(iv) *distribution network service* pricing for,

a *distribution network* situated in South Australia; and

(2) the dispute is not resolved by agreement of the parties in dispute within 5 *business days* (or such other period as the parties agree to be an acceptable period) after the dispute first arose,

then the matter in dispute must be referred by the parties in dispute to the *Jurisdictional Regulator* to act as the *Adviser*. If the *Jurisdictional Regulator* thinks it appropriate, it may also act as the *dispute resolution panel* under the dispute resolution procedures set out in Chapter 8, provided that, if the *Jurisdictional Regulator* elects to act as both the *Adviser* and the *dispute resolution panel*, it must make such arrangements as are necessary to

ensure that, in carrying out its functions as the *dispute resolution panel*, no party may be adversely affected by the *Jurisdictional Regulator* having previously acted as the *Adviser*. If the *Jurisdictional Regulator* is unable or unwilling to make such arrangements, then it must appoint a *dispute resolution panel* in accordance with the *Adviser's* functions in Chapter 8.

(d) This clause expires on 1 July 2010.

9.28.3 [Deleted]

9.29 Transitional Arrangements for Chapter 6 - Economic Regulation of Distribution Services

9.29.1 Jurisdictional Regulator

(a) The South Australian *Essential Services Commission* remains as the *Jurisdictional Regulator* for South Australia until the SA Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.

(b) This clause expires on 1 July 2010.

9.29.2 [Deleted]

9.29.3 [Deleted]

9.29.4 [Deleted]

9.29.5 Distribution Network Pricing – South Australia

(a) In this clause:

price determination means Part B of the 2005–2010 Electricity Distribution Price Determination made under the *Essential Services Commission Act 2002* (SA).

SA Distributor means the *Distribution Network Service Provider* whose *distribution network* is situated in South Australia.

relevant distribution determination means the distribution determination for the *SA Distributor* for the *regulatory control period* that commences in 2010.

small customer has the same meaning as in the *Electricity Act 1996* (SA).

statement of regulatory intent means the *statement of regulatory intent* in regard to the electricity distribution efficiency carryover mechanism issued by the Essential Services Commission on 23 March 2007 under clause 7.4 of the Electricity Pricing Order made by the Treasurer under section 35B of the *Electricity Act 1996* (SA) on 11 October 1999.

(b) The relevant distribution determination:

(1) must incorporate appropriate transitional arrangements to take into account the change from a pre-tax to a *post-tax revenue model* (which must be consistent with any agreement between the *AER* and the *SA Distributor* about the arrangements necessary to deal with the transition); and

(2) must allow the *SA Distributor* to carry forward impacts associated with the calculation of Maximum Average Distribution Revenue under the price determination into the 2010/11 and 2011/12 *regulatory years*.

(c) The *efficiency benefit sharing scheme* under the relevant distribution determination must be consistent with the *statement of regulatory intent*.

(d) The following side constraint is to be applied to tariffs for small customers for the *regulatory control period* to which the relevant distribution determination applies:

The fixed supply charge component of the tariff must not increase by more then $10 from one *regulatory year* to the next.

(e) In preparing its *framework and approach paper* for the distribution determination that is to follow the relevant distribution determination, the *AER* must consider whether the above side constraint should continue with or without modification.

(f) Any reduction in *transmission network* charges as a result of a regulatory reset (excluding reductions resulting from the distribution of *settlements residue* and *settlements residue auction* proceeds) must be paid to all *customers*.

9.29.6 Capital contributions, prepayments and financial guarantees

(a) The amount that a South Australian *Distribution Network Service Provider* may receive by way of capital contribution, prepayment and/or financial guarantee in respect of a *South Australian network* will be determined by the appropriate regulator in accordance with *applicable regulatory instruments*.

(b) This clause operates to the exclusion of clause 6.7.2(b) of the former Chapter 6 (as it continues in force under transitional provisions) and clause 6.21.2(2) of the present Chapter 6.

(c) In this clause:

appropriate regulator means:

(1) if the South Australian Minister has made no transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the South Australian *Essential Services Commission*;

(2) if the South Australian Minister has made a transfer of regulatory responsibility to the *AER* under clause 11.14.4 – the *AER*.

9.29.7 Ring fencing

On the *AER*'s assumption of responsibility for the economic regulation of *distribution services* in *South Australia, the guidelines entitled Operational Ring-fencing Requirements for the SA Electricity Supply Industry: Electricity Industry Guideline No. 9* dated June 2003 (including amendments and substitutions made up to the date the *AER* assumes that responsibility) will be taken to be distribution ring-fencing guidelines issued by the *AER* under Rule 6.17.

9.29A Monitoring and reporting

(a) This clause applies to information about *interconnectors* into South Australia or consisting of South Australian market data that is:

(1) within *AEMO's* control; and

(2) reasonably required by a relevant South Australian authority to fulfil obligations under:

(i) a relevant protocol on the use of emergency powers; or

(ii) regulations under the *Electricity Act 1996* (SA).

(b) *AEMO* must, at the request of a relevant South Australian authority, provide the authority with information to which this clause applies.

(c) The information must be provided by way of a real time data link or, if such a link is not available, by the most expeditious means reasonably practicable in the circumstances.

(d) If the cost incurred by *AEMO* in providing information under this clause exceeds the cost usually incurred in providing a *Market Participant* with information in accordance with the *Rules*, the relevant South Australian authority that requested the information must pay the excess.

(e) In this *Rule*:

relevant protocol on the use of emergency powers means the National Electricity Market Memorandum of Understanding on the Use of Emergency Powers (as amended from time to time) and includes any later protocol on the use of emergency powers agreed between jurisdictions participating in the National Electricity Market.

relevant South Australian authority means:

(a) the Technical Regulator; or

(b) an officer of the South Australian Public Service nominated by the SA Minister to be a responsible officer for the purpose of fulfilling obligations under:

(i) a relevant protocol on the use of emergency powers; or

(ii) regulations under the *Electricity Act 1996* (SA).

Technical Regulator means the person holding or acting in the office of Technical Regulator under section 7 of the *Electricity Act 1996* (SA).

9.30 Transitional Provisions

9.30.1 Chapter 7 - Metering

(1) The transitional metering provisions set out in schedule 9G1 apply to South Australia in respect of Chapter 7.

(2) [**Deleted**]

(3) [**Deleted**]

(4) [**Deleted**]

(5) **[Deleted]**

9.30.2 Participant fees related to additional advisory functions

(a) This clause applies to costs related to the performance of *AEMO's* additional advisory functions in South Australia for the first year after the changeover date.

(b) *AEMO* may recover, as a component of the *participant fees* payable by *Registered participants* of the relevant class, a reasonable estimate of the costs to which this clause applies without budgeting for those costs or otherwise complying with the requirements of these *Rules* for the fixing or recovery of *participant fees*.

(c) In this clause:

additional advisory functions means the functions described in section 50B of the *National Electricity Law.*

relevant class – *a Registered participant* belongs to the relevant class if it is a *regulated transmission system operator* for a *transmission system* in South Australia.

Schedule 9D1 - [Deleted]

Part E – Jurisdictional Derogations for Queensland

9.31 [Deleted]

9.32 Definitions and Interpretation

9.32.1 Definitions

(a) For the purposes of this Part E:

(1) a word or expression defined in the glossary in Chapter 10 has the meaning given to it in the glossary unless it is referred to in column 1 of the following table; and

(2) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	Column 2
connection agreement	Includes all "Connection and Access Agreements" established in Queensland prior to *market commencement.*.
Contestable Customer	A customer prescribed by a regulation made under the *Electricity Act* as a contestable customer.
Electricity Act	The Electricity Act 1994 (Qld).
exempted generation agreement	An agreement between a *State Electricity Entity* and the owner or operator of a *generating system*, as listed at schedule 9E1, and any amendment of such agreement made prior to 13 December 1998 or, if made in accordance with clause 9.34.6(s), thereafter.
GOC Act	The Government Owned Corporations Act 1993 (Qld).
Minister	The Minister administering the *Electricity Act* from time to time.
Nominated Generator	A *State Electricity Entity* determined by the *Minister* for the purposes described in clause 9.34.6 for a *generating system* to which an *exempted generation agreement* applies.
Powerlink Queensland	Queensland Electricity Transmission Corporation Ltd, a corporation established under the *GOC Act.*

Column 1	Column 2
Queensland Competition Authority	The Queensland Competition Authority established under the *Queensland Competition Authority Act*.
Queensland Competition Authority Act	The Queensland Competition Authority Act 1997 (Qld).
Queensland distribution network	A *distribution network* (including any part of a *distribution network*) situated in Queensland.
Queensland Grid Code	The Code of that name first issued by the Department of Mines and Energy (Qld) on 28 November 1994, as amended from time to time.
Queensland system	The sum of the *transmission network* located in Queensland operating at a nominal *voltage* of 275 kV, the *connection assets* associated with that *network* and any *transmission or distribution system connected* to that *network* and also located in Queensland.
Queensland transmission network	A *transmission network* (including any part of a *transmission network*) situated in Queensland.
retail authority	An authority of that name issued under the *Electricity Act.*
Retail Entity	A retail entity as defined in the *Electricity Act.*
Small Generator	A *Generator* whose *generating system* is *connected* to the *Queensland system* and has a *nameplate rating* of less than 5MW.
special approval	An approval of that name issued under the *Electricity Act.*
Stanwell Corporation Ltd	A corporation established under the *GOC Act.*
Stanwell Cross Border Leases	The various agreements, documents and deeds relating to the leasing, ownership and operation of the *generating systems* comprising the *Stanwell Power Station* entered into, or to be entered into, at the request of, or for the benefit of, one or more of *Stanwell Corporation Ltd* and the State of Queensland and whether or not any of *Stanwell Corporation Ltd* or the State of Queensland is a party to those agreements, documents and deeds.
Stanwell Power Station	The *power station* known as the "Stanwell Power Station" located at Stanwell, Queensland.

Column 1	Column 2
State Electricity Entity	A State electricity entity as defined in the *Electricity Act.*
transmission authority	An authority of that name issued under the *Electricity Act.*

(b) For the purposes of the *Rules*, to the extent that any *network* is located in Queensland, a *network* or part of a *network* is a *transmission network* if and only if it satisfies the following definition of "*transmission network*" and the definition of "*transmission network*" given in the glossary in Chapter 10 does not apply in those circumstances:

transmission network	Despite clause 6A.1.5(b) and the glossary of the *Rules*, in Queensland the *transmission network* assets are to be taken to include only those assets owned by *Powerlink Queensland* or any other *Transmission Network Service Provider* that holds a *transmission authority* irrespective of the *voltage* level and does not include any assets owned by a *Distribution Network Service Provider* whether or not such *distribution* assets are operated in parallel with the *transmission system*.

9.32.2 Interpretation

In this Part E, a reference to any authority, corporation or body whether statutory or otherwise, in the event of that authority, corporation or body ceasing to exist or being reconstituted, renamed or replaced or its powers, duties or functions being transferred to or assumed by any other authority, corporation or body, will, as the case requires, be taken to refer to the authority, corporation or body replacing it or the authority, corporation or body, succeeding to or assuming the powers, duties or functions of it.

9.33 Transitional Arrangements for Chapter 1

9.33.1 [Deleted]

9.34 Transitional Arrangements for Chapter 2 - Registered Participants and Registration

9.34.1 Application of the Rules in Queensland (clauses 2.2 and 2.5)

Any person who engages in the activity of owning, controlling or operating:

(a) a *generating system* that *supplies* electricity to a *transmission or distribution system* of a kind referred to in clause 9.34.1(b); or

(b) a *transmission or distribution system* in Queensland which does not form part of the *national grid*,

is not to, and is not to be taken to be entitled to, and is taken to have been exempted from the requirement to, register as a *Registered Participant* in relation to that activity.

9.34.2 Stanwell Cross Border Leases (clause 2.2)

(a) *Stanwell Corporation Ltd* is deemed to be the person that must register as a *Generator* in relation to the *generating systems* which are the subject of the *Stanwell Cross Border Leases*.

(b) The parties (other than *Stanwell Corporation Ltd*) to the *Stanwell Cross Border Leases* are not to be and are not to be entitled to, and are taken to have been exempted from the requirement to, register as a *Generator* in relation to the *generating systems* which are the subject of the *Stanwell Cross Border Leases*.

(c) Clauses 9.34.2(a) and (b) cease to have effect upon the expiry or earlier termination of the last of the *Stanwell Cross Border Leases*.

9.34.3 [Deleted]

9.34.4 Registration as a Customer (clause 2.3.1)

(a) **[Deleted]**

(b) Subject to clause 9.34.4(c), for the purpose of clause 2.3.1(e), a person satisfies the requirements of Queensland for classification of a *connection point* if that person is:

(1) a *Contestable Customer* in relation to that *connection point*; or

(2) a *Retail Entity* who is:

(i) authorised by a *retail authority* to sell electricity to the person *connected* at that *connection point;* or

(ii) the *Local Retailer* for the *local area* in which the *connection point* is located; or

(iii) the holder of a *special approval* which authorises the person to:

(A) purchase electricity in the *market* in respect of that *connection point*; or

(B) sell electricity to the person *connected* at that *connection point*; or

(iv) a person exempted under the *Electricity Act* from the operation of section 89(1) of the *Electricity Act* in relation to the sale of electricity to the person *connected* at that *connection point*.

(c) For the purpose of clause 2.3.1(e), a person does not satisfy the requirements of Queensland for classification of its electricity purchased at a *connection point* in Queensland if the electricity is supplied through a *transmission or distribution system* which does not form part of the *national grid*.

(d) **[Deleted]**

9.34.5 There is no clause 9.34.5

9.34.6 Exempted generation agreements (clause 2.2)

(a) For the purpose of supplying electricity under any *exempted generation agreement,* for each *generating system* which forms part of one of the *power stations* listed in schedule 9E1 the Minister may determine, in consultation in each case with the owner of the relevant *generating system*, whether a *State Electricity Entity* (the "*Nominated Generator*"), rather than another person engaging in the activity of owning, operating or controlling the *generating system*, should be the *Generator* in respect of the *generating system*.

(b) For the purposes of the *Rules* if the *Minister* has determined a *Nominated Generator* for any *generating system* as described in clause 9.34.6(a):

(1) the *Nominated Generator* is taken to be, and at all relevant times to have been, and is the person that must register as, a *Generator* in relation to that *generating system*; and

(2) any person engaging in the activity of owning, controlling or operating that *generating system*, not being the *Nominated Generator*, is not to, is not entitled to, and is taken to have been exempted from the requirement to, register as a *Generator* in relation to that *generating system*.

(c) If complying with a requirement of the *Rules* ("the *Rules Requirement*") would result in a *Nominated Generator* being in breach of a provision of an *exempted generation agreement* to which it is a party (the "*contractual requirement*"), the *Nominated Generator* is not required to comply with the *Rules requirement* to the extent of the inconsistency between the *Rules requirement* and the *contractual requirement* provided that this

clause 9.34.6(c) must not be interpreted to relieve a *Nominated Generator* of the obligation to submit offers in respect of a *scheduled generating unit* or to operate the *generating unit* in accordance with *dispatch instructions* determined under Chapter 3.

(d) If:

(1) a *Nominated Generator* requires the co-operation of one or more of the parties to an *exempted generation agreement* (a "*counterparty*") in order to enable the *Nominated Generator* to comply with the *Rules requirement*;

(2) the *Nominated Generator* has used its reasonable endeavours to obtain the *counterparty's* co-operation in order to enable the *Nominated Generator* to comply with the *Rules requirement*; and

(3) the *Nominated Generator* has no ability to require the *counterparty* to so co-operate with the *Nominated Generator* and the *counterparty* is not in breach of the *exempted generation agreement* by refusing to so co-operate,

then the *Nominated Generator* is not required to comply with the *Rules requirement*.

(e) If a *Nominated Generator* does not comply with a *Rules requirement* in the circumstances set out in clause 9.34.6(c) or (d), the *Nominated Generator* must:

(1) give notice to the *AER* as soon as practicable, and in any event before the expiration of 7 *days* after the non-compliance with the *Rules requirement* occurs or commences, of:

(a) details of the *Rules requirement* which has not been or will not be complied with;

(b) details of each act or omission which partly or wholly constitutes non-compliance with that *Rules requirement*;

(c) in the case of circumstances described in clause 9.34.6(c), unless explicitly prohibited by the terms of the relevant *exempted generation agreement*, details of each *contractual requirement* which is considered by the *Nominated Generator* to be inconsistent with the *Rules requirement*; and

(d) in the case of circumstances described in clause 9.34.6(d), details of the endeavours made by the *Nominated Generator* to obtain the *counterparty's* co-operation to enable the *Nominated Generator* to comply with the *Rules requirement*; and

(2) unless explicitly prohibited by the terms of the relevant *exempted generation agreement*, give the *AER* any documents or information in the possession or control of the *Nominated Generator* which evidence the matters referred to in clause 9.34.6(e)(1) within 14 *days* (or any further period agreed to by the *AER*) of receiving a written request from the *AER*.

(f) To avoid any doubt, if after reviewing a notice and any documents or information given by the *Nominated Generator* under clause 9.34.6(e), the *AER* forms the view that:

(1) in the case of circumstances described in clause 9.34.6(c), compliance with the *Rules requirement* would not have resulted in the *Nominated Generator* being in breach of the relevant *contractual requirement*; or

(2) in the case of circumstances described in clause 9.34.6(d), any of the requirements of clause 9.34.6(d) were not in fact satisfied,

then the matter may be dealt with by the *AER* as a breach of the *Rules*.

(g) **[Deleted]**

(h) A *Nominated Generator* may give notice and information to the *AER* as required in clause 9.34.6(e) in advance if it becomes aware of the potential for the circumstances described in clause 9.34.6(c) or 9.34.6(d) to arise, and the giving of that notice and information will be taken to satisfy the requirements of the *Nominated Generator* in clause 9.34.6(e)(1) in respect of those circumstances.

(i) Notwithstanding the provision of notice and information in advance in accordance with clause 9.34.6(h), the *Nominated Generator* must provide such other documents or information as may be required in accordance with clause 9.34.6(e) after such non-compliance has occurred or commenced.

(j) If non-compliance with the *Rules* is continuing, the notice of non-compliance with the *Rules* provided under clause 9.34.6(e) will be effective in relation to that non-compliance until that non-compliance ends provided that:

(1) the notice specifies that the non-compliance is continuing; and

(2) the *Nominated Generator* notifies the *AER* of the end of the non-compliance no later than 7 days after the non-compliance ends.

(k) Clauses 9.34.6(c) and 9.34.6(d) do not affect the obligations of a *Nominated Generator* with respect to registration with *AEMO* or to making payments under the provisions of the *Rules* in respect of:

(1) *Participant fees*;

(2) *prudential requirements*; or

(3) *settlement amounts*.

(l) Within 30 *days* of the end of each quarter in each calendar year, the *AER* must prepare a quarterly report for the previous quarter and make it available upon request to all *Registered Participants* and those *participating jurisdictions* that participated in the *market* during the quarter covered by the report. The quarterly report must include:

(1) a summary of the acts or omissions of the *Nominated Generator* constituting non-compliance with any requirement of the *Rules*, as disclosed in written notices received by the *AER* under this clause 9.34.6 during the quarter covered by the report: and

(2) an assessment by the *AER* of the effect that those acts or omissions have had on the efficient operation, during the quarter covered by the report, of the *spot market*.

(m) **[Deleted]**

(n) No amendment, other than an amendment to correct a typographical error, may be made to an *exempted generation agreement* unless the parties to the *exempted generation agreement* submit to the *AER*:

(1) the proposed amendment, a copy of the *exempted generation agreement* and such supporting information as the parties consider necessary (the "EGA amendment material");

(2) a request that the *AER* seek advice from the *ACCC* as to whether the *ACCC* considers that the proposed amendment would or may:

(i) **[Deleted]**

(ii) **[Deleted]**

(iii) contravene a provision of the Trade Practices Act 1974 (Cth) or the Competition Code of a *participating jurisdiction*; and

(3) if requested by the *AER* to do so, such further information as may be required by the *AER* in order for the *ACCC* to consider the matters referred to in clause 9.34.6(n)(2),

and the proposed amendment is not prohibited under clause 9.34.6(q).

(o) When the parties to an *exempted generation agreement* submit EGA amendment material to the *AER* in accordance with clause 9.34.6(n), they may include as part of the material submitted a written request that the *AER*

and the *ACCC* treat the EGA amendment material as confidential. In such a case the *AER*:

(1) must comply with that request until such time as the parties to the *exempted generation agreement* notify the *AER* in writing that the *AER* is no longer under an obligation to do so; and

(2) must not provide any EGA amendment material to the *ACCC* unless the parties to the *exempted generation agreement* have notified the *AER* in writing that they have agreed acceptable confidentiality arrangements in relation to the EGA amendment material with the *ACCC* and that the *AER* should provide the EGA amendment material to the *ACCC*.

(p) **[Deleted]**

(q) If, within 10 *business days* of receiving the material referred to in clause 9.34.6(n) or such other period as is agreed between the *AER* and the parties to the *exempted generation agreement*, the *AER* responds that:

(1) the *ACCC* considers that the proposed amendment would or may have any or all of the effects referred to in clause 9.34.6(n)(2); or

(2) the *ACCC* considers that it is unable, because of:

(i) insufficient information before it; or

(ii) any confidentiality arrangements in relation to the EGA amendment material agreed between the *ACCC* and the parties to the *exempted generation agreement*,

to reasonably consider whether the proposed amendment would have any or all of the effects referred to in clause 9.34.6(n)(2),

then the proposed amendment must not be made.

(r) If the *AER* has not provided a response to a request made in accordance with clause 9.34.6(n)(2) within:

(1) 10 *business days* of receiving the material referred to in clause 9.34.6(n); or

(2) such other period as is agreed between the *AER* and the parties to the *exempted generation agreement*,

the *ACCC* is deemed to have no objection to the proposed amendment.

(s) If the *AER* notifies the parties to the *exempted generation agreement* that the *ACCC* has no objection to the proposed amendment, or if the *ACCC* is deemed under clause 9.34.6(r) to have no objection to the proposed

amendment, the parties to the *exempted generation agreement* may make the proposed amendment.

(t) This clause 9.34.6 ceases to have effect in respect of a *generating system* the subject of an *exempted generation agreement* upon the termination of that agreement.

9.35 [Deleted]

9.36 [Deleted]

9.37 Transitional Arrangements for Chapter 5 - Network Connection

9.37.1 [Deleted]

9.37.2 Existing connection and access agreements (clause 5.2)

(a) The technical connection and network pricing requirements of the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998) are to be taken to be a *connection agreement* in respect of both the Gladstone Power Station and the Boyne Island aluminium smelter unless replacement *connection agreements* are entered into in respect of the power station and smelter.

(b) Despite anything to the contrary in clause 5.2.2, if the *generating system* at Gladstone Power Station meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the relevant *generating system* is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Gladstone Power Station.

(c) Despite anything to the contrary in clause 5.2.2, if the Boyne Island aluminium smelter meets the technical connection requirements of the Interconnection and Power Pooling Agreement, or the technical requirements of a replacement *connection agreement* no less onerous than those in the Interconnection and Power Pooling Agreement, the Boyne Island aluminium smelter is to be deemed to comply with all the technical connection requirements of the *Rules* in respect of the Boyne Island aluminium smelter.

(d) Despite anything to the contrary in clause 5.2.2, if Queensland Rail complies with the technical requirements in the *connection agreements* for Queensland Rail *connections* as at 18 January 1998, Queensland Rail is to

be deemed to comply with all the technical connection requirements of the *Rules*.

(e) *Small Generators* are not required to comply with the conditions of *connection* set out in schedule 5.2 of the *Rules*.

9.37.3 [Deleted]

9.37.4 Regulation of distribution network connection (clause 5.3)

(a) This clause 9.37.4 applies in respect of the regulation of *connection* to a *Queensland distribution network*.

(b) Despite anything to the contrary in the *Rules*, the appropriate regulator is responsible for the regulation of *connection* to a *Queensland distribution network*.

(c) The appropriate regulator is:

(1) until the date the *AER* assumes responsibility for the regulation of *connection* to the *Queensland distribution network* – the *Jurisdictional Regulator* for Queensland; and

(2) from that date – the *AER*.

(d) For the purposes of clause 5.3.6(c), any question as to the fairness and reasonableness of an offer to *connect* to a *Queensland distribution network* is to be decided by the appropriate regulator on the basis of the appropriate regulator's opinion of the fairness and reasonableness of the offer.

(e) If a dispute arises in relation to *connection* to a *Queensland distribution network*, then that dispute must be resolved in accordance with Chapter 8 and for this purpose a reference in Chapter 8 to "*power system*" is deemed to be a reference to the "*Queensland system*".

(f) This clause expires on 1 July 2010.

9.37.5 Forecasts for connection points to transmission network (clause 5.6.1)

If a *Network Service Provider*, on the *Queensland system*, modifies forecast information in accordance with clause 5.6.1(d), then that *Network Service Provider* is not required to notify the relevant *Registered Participant* if it has conflicting confidentiality obligations to other *Registered Participants*.

9.37.6 There is no clause 9.37.6

9.37.7 Cross Border Networks

(a) If:

(1) the *Minister* considers that a *transmission network* or *distribution network* situated in Queensland is a continuation of a *network* situated in another *participating jurisdiction* and should be considered to be part of the *network* of that other *participating jurisdiction*; and

(2) the *Minister* for that other *participating jurisdiction* consents,

then those *Ministers* may nominate that the *network* is deemed to be entirely in that other *participating jurisdiction* and the *Rules* including any relevant *jurisdictional derogations* for the other *participating jurisdiction* are deemed to apply to the *network* as if the *network* were located entirely within that other *participating jurisdiction*.

(b) If a nomination is made under clause 9.37.7(a), then the *jurisdictional derogations* for Queensland do not apply to the continuation of the relevant *network* which is situated in Queensland.

(c) If the *Minister* of another *participating jurisdiction* nominates that the *jurisdictional derogations* for Queensland should apply to a *network* part of which is situated in that other *participating jurisdiction,* then if the *Minister* in respect of Queensland consents, the *jurisdictional derogations* for Queensland are also to apply to that part of the *network* situated in the other *participating jurisdiction*.

9.37.8 [Deleted]

9.37.9 Credible contingency events (clause S5.1.2.1 of schedule 5.1)

(a) The *protection systems* installed on any 110/132kV lines located in Queensland and existing at *market commencement* are deemed to comply with clause S5.1.2.1(d) of schedule 5.1 of the *Rules* except where such *protection system* has a material effect in degrading the stability and security of the *Queensland system* or the *power system*.

9.37.10 Reactive power capability (clause S5.2.5.1 of schedule 5.2)

Clause S5.2.5.1 of schedule 5.2 of the *Rules* is replaced for each of the *generating units* situated at the relevant *power station* listed in the following table by the following:

For the purpose of this clause S5.2.5.1:

'*rated active power output*' means the 'Rated MW (Generated)' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*; and

'*nominal terminal voltage*' means the 'Nominal Terminal *Voltage*' (as defined in the *Generating System Design Data Sheet*) for the relevant *synchronous generating unit*.

(a) Each of the *generating units*, while operating at any level of *active power* output, must be capable of:

(1) supplying at its terminals an amount of *reactive power* of at least the amount that would be supplied if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a lagging power factor of 0.9; and

(2) absorbing at its terminals an amount of *reactive power* of at least the amount that would be absorbed if the *generating unit* operated at *rated active power output*, *nominal terminal voltage* and a leading power factor set out in respect of that *generating unit* in column 3 of the following table.

(b) In the event that any of the relevant power factors referred to in paragraph (a) above cannot be provided in respect of a *generating unit*, the relevant *Generator* must reach a commercial arrangement under its *connection agreement* with the relevant *Network Service Provider*, or with another *Registered Participant*, for the supply of the deficit in *reactive power* as measured at that *generating unit's* terminals.

Power station	**Generating units**	**Leading power factor**
Gladstone	Units 1 to 4	0.99
Gladstone	Units 5 & 6	0.94
Collinsville	Units 1 to 5	0.95

9.37.11 [Deleted]

9.37.12 Voltage fluctuations (clause S5.1.5 of schedule 5.1)

For application in Queensland, clause S5.1.5 of schedule 5.1 of the *Rules* is replaced with the following:

"A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* must include conditions in *connection agreements* in relation to the permissible variation with time of the power *generated* or *load* taken by a *Registered Participant* to ensure that

other *Registered Participants* are supplied with a power-*frequency voltage* which fluctuates to an extent that is less than the limit defined by the "Threshold of Perceptibility" or the "Threshold of Irritability" as the case may be for the conditions specified in the paragraph below, in Figure 1 of *Australian Standard* AS2279, Part 4.

A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* must ensure that *voltage* fluctuations caused by the switching or operation of *network plant* does not exceed the following amounts referenced to Figure 1 of *Australian Standard* AS 2279, Part 4:

(1) Above 66kV:

(A) the "Threshold of Perceptibility" when all *network plant* is in service; and

(B) the "Threshold of Irritability" during any *credible contingency event* which is reasonably expected to be of short duration;

(2) 66kV and below: the "Threshold of Irritability" when all *network plant* is in service.

The requirements of paragraphs (1) and (2) above do not apply to events such as switching of *network plant* to or from an abnormal state or to *network* faults which occur infrequently (ie. less than one event per day).

Where the *Rules* (other than this Part E) refer to clause S5.1.5(a) or (b) of schedule 5.1 of the *Rules* then, in so far as that reference relates to a *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* or to a *network* which is a *Queensland transmission network* or a *Queensland distribution network*, that reference must be construed as a reference to the immediately preceding paragraph.

A *Network Service Provider* whose *network* is a *Queensland transmission network* or a *Queensland distribution network* is responsible only for excursions in *voltage* fluctuations outside the range defined in the first two paragraphs of this clause S5.1.5 caused by *network plant* and the pursuit of all reasonable measures available under the *Rules* to remedy the situation in respect of *Registered Participants* whose *plant* does not perform to the standards defined by clause S5.2.5.2(c) of schedule 5.2 of the *Rules* for *Generators*, the standards set out in the first paragraph below for *Customers* and the standards set out in the second paragraph below for *Market Network Service Providers.*

Each *Customer* must ensure that variations in current at each of its *connection points* including those arising from the *energisation,* de-energisation or operation of any *plant* within or supplied from the *Customer's substation* are such that the contribution to the magnitude and

rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

(i) where only one *Customer* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard* AS2279, Part 4; or

(ii) where two or more *Distribution Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

Each *Market Network Service Provider* must ensure that variations in current at each of its *connection points* arising from the *energisation,* de-energisation or operation of any of its *plant* involved in the provision of *market network services* are such that the contribution to the magnitude and rate of occurrence of the resulting *voltage* disturbance does not exceed the following limits:

(i) where only one *Market Network Service Provider* has a *connection point* associated with the point of *supply*, the limit is 80% of the threshold of perceptibility set out in Figure 1 of *Australian Standard* AS2279, Part 4; or

(ii) where two or more *Distribution Network Service Providers, Market Network Service Providers* or *Customers* causing *voltage* fluctuations have a *connection point* associated with a point of *supply*, the threshold of perceptibility limit is to be shared in a manner to be agreed between the *Distribution Network Service Provider* and the *Registered Participant* in accordance with *good electricity industry practice* that recognises the number of *Registered Participants* in the vicinity that may produce *voltage* fluctuations.

For these purposes, references to *Australian Standard* AS2279 are references to that standard as it existed prior to it being superseded by AS/NZS 61000.3.7:2001."

9.37.13 [Deleted]

9.37.14 [Deleted]

9.37.15 [Deleted]

9.37.16 [Deleted]

9.37.17 [Deleted]

9.37.18 [Deleted]

9.37.19 Generating unit response to disturbances (clause S5.2.5.3 of schedule 5.2)

(a) Despite the provisions of clause S5.2.5.3 of schedule 5.2 of the *Rules*, the *generating units* listed in the following table are not required to operate continuously outside the corresponding *frequency* band specified in column three of the following table:

Power station	Generating units	Frequency band
Gladstone	Units 1 to 6	47.5 Hz to 51.5 Hz
Collinsville	Units 1 to 4	48.0 Hz to 51 Hz
Collinsville	Unit 5	48.0 Hz to 52 Hz

(b) **[Deleted]**

(b1) **[Deleted]**

9.37.20 [Deleted]

9.37.21 Excitation control system (clause S.5.2.5.13 of schedule 5.2)

(a) For each of the *generating units* listed in the following table:

(1) the application of clause S5.2.5.13(a) of schedule 5.2 of the *Rules* is modified by amending it to ensure that the short-time average *generating unit* stator *voltage* at highest rated power output level is not required to be more than 5% above nominal stator *voltage;* and

(2) the application of clause S5.2.5.13(b) of schedule 5.2 of the *Rules* is modified by deleting the words "all operating conditions" and replacing them with the words "all normal operating conditions and any *credible contingency event*".

Power station	Generating units
Gladstone	Units 1 to 6
Collinsville	Units 1 to 5

(b) **[Deleted]**

(c) **[Deleted]**

(d) For Collinsville Power Station, any variation to the minimum performance requirements specified in clause S5.2.5.13 of schedule 5.2 of the *Rules* is to be limited to figures agreed with the *Network Service Provider* to whose *network* the Collinsville Power Station is *connected*.

(e) A *Generator* whose *generating unit* is situated in Queensland must ensure that each new *synchronous generating unit* of greater than 100MW is fitted with a *static excitation system* or some other *excitation control system* which will provide *voltage* regulation to within 0.5% of the selected setpoint value unless otherwise agreed with the relevant *Network Service Provider*.

9.37.22 [Deleted]

9.37.23 Annual forecast information for planning purposes (schedule 5.7)

Each *Registered Participant* that has a *connection point* to a *Queensland transmission network* must submit to the relevant Queensland *Transmission Network Service Provider* a forecast of the annual *energy* consumption associated with each *connection point* together with the information set out in schedule 5.7 of the *Rules*.

9.38 Transitional Arrangements for Chapter 6 - Network Pricing

9.38.1 [Deleted]

9.38.2 [Deleted]

9.38.3 Arrangements for regulation of distribution pricing

(a) The *Queensland Competition Authority* remains *Jurisdictional Regulator* for Queensland until the Queensland Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.

(b) Subject to clause 11.14.3, the regulation of *distribution network* service pricing for a *Queensland distribution network* must be in accordance with the *Electricity Act* and the *Queensland Competition Authority Act*.

(c) This clause expires on 1 July 2010 or an earlier date nominated by the Queensland Minister.

9.38.4 Interconnectors between regions

For the purposes of the *Rules,* the *interconnector* between Armidale in New South Wales and Tarong in Queensland, to the extent that it forms part of the *Queensland system*, is deemed to be a *regulated interconnector*.

9.38.5 Transmission pricing for exempted generation agreements

(a) Notwithstanding the provisions of Chapter 6, the amounts payable for *transmission services* in respect of a *generating system* or a *load* the subject of an *exempted generation agreement* by a *Generator* or *Customer* which is referred to in an *exempted generation agreement*, or the relevant *State Electricity Entity* nominated pursuant to clause 9.34.6(a), as the case may be, will be the amounts payable under the *connection agreement* in respect of that *generating system* or *load*.

(b) If the amounts payable for *transmission services* under clause 9.38.5(a) differ to those that would have been payable if the amounts had been calculated in accordance with the provisions of Chapter 6 (as modified by this clause 9.38) then the amount of that difference is to be recovered in accordance with clause 6.5.6(a).

(c) For the purpose of clause 9.38.5(b), the amount of any difference is to be recovered from *Transmission Customers* located in Queensland and connected to the *Queensland system* and is not otherwise to be taken into account in determining *Transmission Customer common service charges* under clause 6.5.6(a).

(d) For the application of clause 9.38.5(a) to the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium smelter, the *connection agreement* referred to is the Interconnection and Power Pooling Agreement dated 30 March 1994 between the owners of the Gladstone Power Station and the Queensland Electricity Commission (as amended prior to 18 January 1998), or any *connection agreements* entered into in respect of those *connection points* in replacement of that agreement, provided that in the latter case any difference to be recovered pursuant to clause 9.38.5(b) must not exceed that which would have applied had that agreement continued.

(e) Clause 9.38.5(a) continues to apply in respect of the *generating system* at Gladstone Power Station and the *load* at the Boyne Island aluminium smelter despite the entering into *connection agreements* in replacement of the Interconnection and Power Pooling Agreement as envisaged in clause 9.38.5(d).

9.39 Transitional Arrangements for Chapter 7 - Metering

9.39.1 Metering installations to which this clause applies

(a) The transitional *metering* provisions set out in schedule 9G1 apply to Queensland in respect of Chapter 7.

(b) Notwithstanding the application of schedule 9G1 in Queensland, the transitional arrangements set out in this clause 9.39 apply in relation to a *metering installation* (including a *check metering installation*) that meets the following criteria:

(1) at 1 October 1997, the *metering installation*:

(i) was a *metering installation* to which the *Queensland Grid Code* applied; and

(ii) complied with the metering requirements of the *Queensland Grid Code*; and

(2) excepting normal repair and maintenance, no part of the *metering installation* has been modified or replaced since 1 October 1997.

9.39.2 [Deleted]

9.39.3 [Deleted]

9.39.4 [Deleted]

9.39.5 [Deleted]

9.40 Transitional Arrangements for Chapter 8 - Administration Functions

9.40.1 [Deleted]

9.40.2 [Deleted]

9.40.3 [Deleted]

9.41 [Deleted]

Schedule 9E1 - Exempted Generation Agreements

Station Name	Owner or Operator of Station	Date of Agreement
Gladstone Power Station	GPS Participants[1]	30 March 1994
Collinsville Power Station	Collinsville Participants[2]	30 November 1995
Townsville Power Station	Transfield Townsville Pty Ltd A.C.N. 075 001 991	2 August 1996
Oakey Power Station	Oakey Power Pty Ltd A.C.N. 075 258 114	10 September 1996
Mt Stuart Power Station	Origin Energy Mt Stuart, a general partnership between Origin Energy Mt Stuart BV (ARBN 079 232 572) & Origin Energy Australia Holdings BV (ARBN 079 234 165)	5 August 1996
Various Sugar Mills	Queensland Sugar Power Pool Pty Ltd A.C.N. 072 003 537	21 December 1995
Somerset Dam Hydro	Hydro Power Pty Ltd A.C.N. 010 669 351	1 June 1996
Browns Plains Landfill Gas	EDL LFG (QLD) Pty Ltd A.C.N. 071 089 579 and Energex Limited A.C.N. 078 849 055	31 July 1996

1

GPS Participants	Each of:	GPS Power Pty Ltd, A.C.N. 009 103 422; GPS Energy Pty Ltd, A.C.N. 063 207 456; Sunshine State Power B.V., A.R.B.N. 062 295 425; Sunshine State Power (No 2) B.V., ARBN 063 382 829; SLMA GPS Pty Ltd, A.C.N. 063 779 028; Ryowa II GPS Pty Ltd, A.C.N. 063 780 058; and YKK GPS (Queensland) Pty Ltd, A.C.N. 062 905 275.

2

Collinsville Participants	Each of:	Transfield Collinsville Pty Ltd, A.C.N. 058 436 847; and Transfield Services Collinsville B.V., A.R.B.N. 070 968 606.

Part F – Jurisdictional Derogations for Tasmania

9.41A [Deleted]

9.42 Definitions and interpretation

9.42.1 Definitions

For the purposes of this Part F:

(a) a word or expression defined in the glossary in chapter 10 has the meaning given to it in the glossary, unless it is referred to in column 1 of the following table; and

(b) a word or expression referred to in column 1 of the following table has the meaning given to it in column 2 of the table:

Column 1	**Column 2**
Aurora	Aurora Energy Pty Ltd (ABN 85 082 464 622).
Basslink	The project for the interconnection, by means of a DC electricity transmission link, of the Victorian and Tasmanian *transmission systems*.
ESI Act	The Electricity Supply Industry Act 1995 (Tas).
George Town Substation	The electricity substation located on the land comprised in Certificate of Title Volume 34076 Folio 1.

Column 1	Column 2
Hydro Tasmania	The Hydro-Electric Corporation (ABN 48 072 377 158).
Interconnection Date	The date on which *Basslink* enters into commercial operation, being the Commissioning Date as defined in the Basslink Project Interpretation Memorandum dated 29 November 2002 between the Crown in right of the State of Tasmania, Basslink Pty Ltd, National Grid Transco plc, National Grid Holdings Limited and *Hydro Tasmania*.
Minister	The Minister for the time being responsible for administering the *ESI Act*.
National Electricity Code	The code of conduct called the National Electricity Code approved, in accordance with section 6(1) of the Old National Electricity Law, as the initial Code for the purposes of that Law, and as amended from time to time in accordance with its terms and the Old National Electricity Law.
Old National Electricity Law	The Schedule to the National Electricity (South Australia) Act 1996 (SA) as in force from time to time before the commencement of section 12 of the National Electricity (South Australia) (New National Electricity Law) Amendment Act 2005 (SA).
Price Control Regulations	The Electricity Supply Industry (Price Control) Regulations made under the *ESI Act*.
Reliability and Network Planning Panel	The panel of that name established by the *Tasmanian Electricity Regulator* of the *Tasmanian Code*.
Retail Licence	A licence authorising the retailing of electricity issued under the *ESI Act*.

Column 1	**Column 2**
Tasmanian Code	The Tasmanian Electricity Code issued under section 49A of the *ESI Act*.
Tasmanian Code Participant	A person who is a Code Participant within the meaning of the *Tasmanian Code*.
Tasmanian Determination on Power System Frequency Operating Standards	The Determination on Frequency Operating Standards for the Tasmanian Power System issued by the *Reliability and Network Planning Panel*.
Tasmanian Electricity Regulator	The office of the Regulator established pursuant to section 5 of the *ESI Act*.
Tasmanian Network Service Provider	A person who is a *Network Service Provider* in respect of a *network* located in Tasmania (including the *Network Service Provider* in respect of *Basslink)*.
Tasmanian power system security and reliability standards	The standards governing security and reliability of the power system located in Tasmania determined by the *Reliability and Network Planning Panel* in accordance with the *Tasmanian Code*, including the *Tasmanian Determination on Power System Frequency Operating Standards* and the standards for capacity reserves.
Third Tranche Commencement Date	The day which the *Minister* notifies *NEMMCO* is the day on which customers taking an amount of electricity equal to or in excess of 0.75GWh/yr and less than 4GWh/yr at a *connection point* in Tasmania first become contestable customers (within the meaning of the *ESI Act*).
Transend	Transend Networks Pty Limited (ABN 57 082 586 892).
Transition Date	The date on and from which section 6 of the Electricity - National Scheme (Tasmania) Act 1999 commences.

9.42.2 Interpretation

In this Part F, references to Tasmania do not include King Island or Flinders Island unless the context otherwise requires.

9.42.3 National grid, power system and related expressions

Notwithstanding anything else in the *Rules*, but subject to the other provisions of this Part F, on and from the *Transition Date*:

(a) the *connected transmission systems* and *distribution systems* located in Tasmania are to be treated as forming part of the *national grid* and the interconnected *transmission* and *distribution networks*; and

(b) the electricity power system located in Tasmania, including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, is to be treated as forming part of the *power system* and the electricity system,

even if they are not *connected* to a *network* or *networks* in other *participating jurisdictions*.

9.43 Transitional arrangements for Chapter 1 - Introduction - Validity of certain actions taken prior to Transition Date

If:

(a) the *AEMC,* the *AER, NEMMCO,* any *Rules body,* any *Registered Participant,* the *Tasmanian Electricity Regulator* or any *Tasmanian Code Participant* takes any action to enable any entity to perform functions under, or obligations imposed by, a provision of the *Rules* before the *Transition Date* in anticipation of the relevant provision applying in Tasmania on the *Transition Date*; and

(b) the action was taken so far as reasonably practicable in accordance with the provision (as though the provision applied in Tasmania at the time the relevant action was taken),

then the action is deemed to have been validly taken in accordance with that provision with effect on and from the *Transition Date*. For the avoidance of doubt:

(c) any action taken for the purposes of this clause 9.43 by the *Tasmanian Electricity Regulator* prior to the *Transition Date* to enable the *Jurisdictional Regulator* to perform functions under, or obligations imposed by, a provision of the *Rules* in anticipation of that provision coming into effect on the *Transition Date* is deemed to have been taken by the *Jurisdictional Regulator*; and

(d) the *AEMC*, the *AER*, *NEMMCO*, any *Rules body* or other person ("Recipient") may treat any submission, application, approval, statement or document ("application") given to it by a person in anticipation of a provision of the *Rules* applying in Tasmania as having been given to the Recipient under that provision of the *Rules* and may take action under the *Rules* on the basis of that application or taking into account that application.

9.44 Transitional arrangements for Chapter 2 – Registered Participants and Registration - Customers (clause 2.3.1(e))

For the purposes of clause 2.3.1(e), and for the purposes of clause 2.4.2(b) in so far as it relates to *Customers*, a person satisfies the requirements of Tasmania for classification of a *connection point* of that person if that person is the holder of a *Retail Licence* or is a contestable customer within the meaning of the *ESI Act* in respect of that *connection point*.

9.45 Transitional arrangements for Chapter 3 - Market Rules

9.45.1 Tasmanian Region (clause 3.5)

(a) Notwithstanding clause 3.5, the State of Tasmania is, and must be, one *region* and that *region* must not include any areas which fall outside of the State of Tasmania.

(b) Notwithstanding clause 3.5.1(c), the *regional reference node* for the Tasmanian *region* is the 220kV *busbar* located at the *George Town Substation*.

(c) Clauses 9.45.1(a) and (b) cease to have effect from the beginning of the *Third Tranche Commencement Date*.

9.45.2 Administered Price Cap (clause 3.14.1)

Until a different *administered price cap* is developed, authorised and published in accordance with clause 3.14.1(a) for the Tasmanian *region*, the administered price cap for the Tasmanian region is:

(1)$100/MWh between 7.00 am and 11.00 pm on a *business day*; and

(2)$50/MWh at all other times.

9.45.3 Settlement Residue Auctions (clause 3.18.1)

(a) To avoid doubt, *Basslink* is not a *directional interconnector* for the purposes of clause 3.18.

(b) Clause 9.45.3(a) ceases to have effect at the end of the second anniversary of the *Transition Date*.

9.46 Transitional arrangements for Chapter 4 - Power System Security

9.46.1 Satisfactory Operating State (clause 4.2.2)

If the *frequency* at a *busbar* located in Tasmania is within the containment range for a load event as specified in the *Tasmanian Determination on Power System Frequency Operating Standards*, then that *frequency* will be taken to be within:

(1) the *normal operating frequency excursion band* for the purposes of the *Rules*; and

(2) any *frequency* band (whatever it is called) specified in or under the *Rules* or the *power system security and reliability standards* which is applied by *AEMO* or any other person for a similar purpose as the *normal operating frequency excursion band* is applied under clause 4.2.2(a).

9.46.2 Secure operating state and power system security (clause 4.2.6(c))

In applying the *power system security* principle specified in clause 4.2.6(c) in relation to Tasmania, *AEMO* must have regard to the power *frequency* bands specified in the *Tasmanian Determination on Power System Frequency Operating Standards* in substitution for the *frequency* bands contemplated by that clause.

9.46.3 Market Customer obligations (clause 4.3.5(b))

Notwithstanding clause 4.3.5(b), *Market Customers* must provide their *interruptible load* in respect of *connection points* located in Tasmania in manageable blocks spread over a number of steps within under-*frequency* bands down to the lower limit of the "extreme frequency excursion tolerance limits" (as specified in the *Tasmanian Determination on Power System Frequency Operating Standards*) and not 47.0Hz as specified in clause 4.3.5(b).

9.46.4 Power System Frequency Control Responsibilities (clause 4.4.1)

Notwithstanding clause 4.4.1 and the *power system security and reliability standards*, *AEMO* must use reasonable endeavours to ensure that, in Tasmania, the *frequency* levels specified in the *Tasmanian Determination on Power System Frequency Operating Standards* are achieved.

9.47 Transitional arrangements for Chapter 5- Network Connection

9.47.1 Existing Connection Agreements

The following agreements are each to be taken to be a *connection agreement* for the purposes of clause 5.2:

(a) the Connection Agreement dated 1 July 1998 between *Aurora* and *Hydro Tasmania*;

(b) the Connection and Network Services Agreement dated 1 July 1998 between *Transend* and *Aurora*;

(c) the Connection and Network Services Agreement dated 1 July 1998 between *Transend* and *Hydro Tasmania*;

(d) the Basslink Connection Agreement dated 28 January 2000 between National Grid International Limited and *Transend*; and

(e) any other connection agreement entered into prior to the *Transition Date* in accordance with the *Tasmanian Code*.

9.47.2 [Deleted]

9.47.3 Frequency variations (clauses S5.1.3 and S5.1.10)

In performing the functions contemplated by clauses S5.1.3 and S5.1.10 of schedule 5.1 of the *Rules* in relation to that part of the *power system* located in Tasmania, *AEMO* and *Tasmanian Network Service Providers* must apply the power system *frequency* bands specified in the *Tasmanian Determination on Power System Frequency Operating Standards* in Tasmania in substitution for the *frequency* bands specified in the *power system security and reliability standards*.

9.47.4 Fault clearance times (clauses S5.1.9 and S5.1a.8 and table S5.1a.2)

(a) Notwithstanding clause S5.1.9 of schedule 5.1 of the *Rules* and clause S5.1a.8, and table S5.1a.2, of schedule 5.1a of the *Rules*, if:

(1) there is no system for communication between the faulted end and the remote end of a power line located in Tasmania; or

(2) there is a maintenance *outage* of the system for communication between the faulted end and the remote end of a power line located in Tasmania,

then the remote end maximum *fault clearance time* in respect of that power line is 600 milliseconds.

(b) Notwithstanding clause S5.1.9 of schedule 5.1 of the *Rules* and clause S5.1a.8, and table S5.1a.2, of schedule 5.1a of the *Rules*, if there is no circuit breaker failure protection in respect of a power line located in Tasmania, then the breaker fail maximum *fault clearance time* for that line is 1100 milliseconds.

(c) Clauses 9.47.4(a) and (b) cease to have effect at the end of the first anniversary of the *Transition Date*.

9.48 Transitional arrangements for Chapter 6 - Transmission and Distribution Pricing

9.48.1 [Deleted]

9.48.2 Transmission Service Pricing

(a) A "Pre-NEM Determination" is a determination, decision or ruling made or set by the *ACCC* which:

(1) is made under any of the *ESI Act*, the *Price Control Regulations* or the *Tasmanian Code* (together called the "Tasmanian regulatory regime");

(2) relates to or is connected with transmission pricing (including, without limitation, a determination, decision or ruling relating to the setting or re-setting of a revenue cap);

(3) is made prior to the *Transition Date*, but applies until a date which falls after the *Transition Date*; and

(4) is equivalent to or has substantially the same effect as a determination, decision or ruling ("Equivalent Determination") which the *AER* may make or set under the *Rules* or which is contemplated by the *Rules*.

(b) Subject to clause 9.48.2(d), a Pre-NEM Determination is:

(1) deemed to have been validly made or set under the *Rules* in accordance with any procedures or steps which apply to the making of an Equivalent Determination; and

(2) deemed to be an Equivalent Determination under the *Rules*.

(c) Subject to clause 9.48.2(d), any action taken by a *Tasmanian Code Participant* as a result of, or to implement or following a Pre-NEM Determination under the Tasmanian regulatory regime in accordance with the instruments comprising that regime is deemed to have been validly taken in accordance with the *Rules*.

(d) If, at any time after the *Transition Date*, it appears to the *AER* that:

(1) a Pre-NEM Determination or action referred to in clause 9.48.2(c) is inconsistent with the relevant principles in the *Rules* in a material way; and

(2) the inconsistency is due to a material difference between the Tasmanian regulatory regime and the *Rules* or the *National Electricity Code* (in the form the instruments comprising that regime and the *Rules* or the *National Electricity Code* (as the case may be) were in at the time of the Pre-NEM Determination or action),

then the *AER* may re-open the Pre-NEM Determination or disallow the action by written notice to the *Minister*. A notice under this clause 9.48.2(d) must set out a summary of the reasons why the *AER* is giving the notice. Clause 9.48.2(b) or (c) (as applicable) ceases to apply to a Pre-NEM Determination or action the subject of a notice under this clause 9.48.2(d) from the time specified in the notice.

(e) To avoid doubt, the *AER* may make or set a determination, decision or ruling in accordance with the *Rules* that replaces a Pre-NEM Determination re-opened under clause 9.48.2(d).

(f) [**Deleted**]

(g) If:

(1) Chapter 6 of the *National Electricity Code* was amended after 22 November 2000 and before the *Transition Date* or Chapter 6 of the *Rules* is amended before the *Transition Date*;

(2) those amendments contemplate a change in the allocation of costs amongst users of *transmission networks*; and

(3) those amendments contemplate transitional arrangements for the phasing in of that change,

then equivalent transitional arrangements also apply to users of *transmission networks* located in Tasmania, and the prices which apply immediately before the *Transition Date* are the starting point for the phase-in.

9.48.3 Distribution Service Pricing – Jurisdictional Regulator

(a) The *Tasmanian Electricity Regulator* remains *Jurisdictional Regulator* for Tasmania until the Tasmanian Minister makes a transfer of regulatory responsibility to the *AER* under clause 11.14.4.

(b) This clause expires on 1 July 2012 or an earlier date fixed by the Tasmanian Minister and notified in the Tasmanian Government Gazette.

9.48.4 Distribution Service Pricing

(a) For the purposes of clause 11.14.3(a), but subject to clauses 11.14.3, 11.14.4 and 11.14.6, the regulation of *distribution service* pricing for any *distribution network* situated in Tasmania must be in accordance with the *ESI Act* and the *Tasmanian Code* to the exclusion of provisions or former provisions of these Rules that would otherwise be applicable.

(b) This clause expires on 1 July 2012 or an earlier date fixed by the Tasmanian Minister and notified in the Tasmanian Government Gazette.

9.48.4A Ring fencing

On the *AER*'s assumption of responsibility for the economic regulation of *distribution services* in Tasmania, the following guidelines (as amended or substituted from time to time) will be taken to be distribution ring-fencing guidelines issued by the *AER* under Rule 6.17:

(1) *Guideline for Ring-fencing in the Tasmanian Electricity Supply Industry* (dated October 2004); and

(2) *Electricity Distribution and Retail Accounting Ring-fencing Guidelines: Electricity Guideline No 2.2, Issue No 3, May 2005*.

Note:

The AER will assume responsibility for the economic regulation of distribution services on the transfer of regulatory responsibility under clause 11.14.4.

9.48.4B Uniformity of tariffs for small customers

(a) In making a distribution determination or approving a *pricing proposal* for a Tasmanian *Distribution Network Service Provider*, the *AER* must ensure that distribution tariffs for small customers of a particular class are uniform regardless of where in mainland Tasmania the customer is supplied with electricity.

(b) In this clause, *small customer* has the same meaning as in regulations under the *Electricity Supply Industry Act 1995* (Tas).

9.48.5 Transmission network

For the purpose of the *Rules*, a *network* operating at "extra high voltage" (as that term is defined in the *ESI Act*) is deemed to be a *transmission network*.

9.48.6 Deemed regulated interconnector

For the purposes of the *Rules*, any *interconnector* between *regions* in Tasmania in existence when those *regions* are established, to the extent that it forms part of the *power system* in Tasmania, is deemed to be a *regulated interconnector*.

9.49 Transitional arrangements for Chapter 8 - Administrative Functions

9.49.1 Frequency Standards (clause 8.8.1)

Notwithstanding anything else in the *Rules*, but subject to the other provisions of this Part F:

(a) on and from the *Transition Date* until the start of the *Interconnection Date*, the *power system security and reliability standards* applicable in Tasmania are the *Tasmanian power system security and reliability standards* and not those determined by the *Reliability Panel* under clause 8.8;

(b) on and from the *Interconnection Date* until the end of the second anniversary of the *Transition Date*, the standards governing *frequency* in respect of that part of the *power system* located in Tasmania are those set out in the *Tasmanian Determination on Power System Frequency Operating Standards* and not those in the *power system security and reliability standards* or applying elsewhere in or under the *Rules*; and

(c) after the second anniversary of the *Transition Date*, the standards governing *frequency* in respect of that part of the *power system* located in Tasmania are those set out in the *power system security and reliability standards* determined as contemplated in clause 9.49.3 and not those in any other set of standards or applying elsewhere in or under the *Rules*,

and provisions of the *Rules* referring to or relating to *frequency*, *frequency operating standards, frequency* bands, *frequency* ranges or *frequency* limits must be interpreted accordingly.

9.49.2 Termination of frequency derogations

Clauses 9.46.1, 9.46.2, 9.46.3, 9.46.4 and 9.47.3 cease to have effect from the end of the second anniversary of the *Transition Date*.

9.49.3 Reliability Panel

Before the first anniversary of the *Transition Date*, the *Reliability Panel* must determine *power system security and reliability standards* under clause 8.8 that, in so far as they apply in respect of Tasmania, reflect the principles set out in clause 9.49.4.

9.49.4 Principles to be applied by Reliability Panel

In determining and amending *power system security and reliability standards* the *Reliability Panel* must ensure that, in so far as they apply in respect of Tasmania, those standards reflect the following principles:

(a) in so far as they relate to *frequency*, such standards must be made having regard to the following:

(1) any existing standards in relation to those matters;

(2) the costs and benefits of any change proposed to those existing standards; and

(3) the size and characteristics of the separate systems that make up the *power system*;

(b) where the *network* or *networks* located in a particular area or *region* in Tasmania is or are only *connected* to other areas or *regions* by means of an asynchronous link, the *power system security and reliability standards*, in so far as they relate to *frequency*, may incorporate different standards for the first area or *region* to those applying elsewhere in the *power system*; and

(c) the *power system security and reliability standards*, in so far as they relate to *frequency*, must allow less stringent standards for the *frequency* of a *network* or *networks* located in a particular area or *region* in Tasmania when that area or *region* is isolated from the remainder of the *power system*.

Part G - Schedules to Chapter 9

Schedule 9G1 - Metering Transitional Arrangements

1. Introduction

(a) The following minimum requirements apply in respect of *metering installations* commissioned before 13 December 1998.

(b) **[Deleted]**

2. [Deleted]

3. General Principle

The general principle is that *meters* are required and a *metering installation(s)* capable of recording half-hour *energy* flows and of providing electronic data for transfer to the *metering database* is to be in place for each *Market Participant's connection point(s)* before the *Market Participant* is permitted to participate in the *market*, and there will be no relaxation of this principle in the *jurisdictional derogations.*

4. [Deleted]

5. Accuracy Requirements

5.1 Existing Metering Installations Transitional Exemptions

In addition to those allowances in clause S7.2.2 of schedule 7.2 - "Metering installations commissioned prior to 13 December 1998", the following conditions/exemptions apply:

(a) For *Generators*, *generated* quantities together with estimates for *generating unit* auxiliary loads may be used provided there is an agreed method with *NEMMCO* for determining *sent-out* energy. [refer to clause 7.3.2]

(b) The *check metering* requirements of the *Rules* do not have to be met for Type 1 *metering installations*. A minimum of partial *check metering* is required for Types 1 and 2 *metering installations*. [refer to clause S7.2.4 of schedule 7.2 of Chapter 7]

(c) Joint use of secondary circuits for *revenue metering* is permitted for Type 1 *metering installations*. [refer to cl.S7.2.6.1(a) of schedule 7.2 of Chapter 7]

5.2 [Deleted]

6. [Deleted]

7. [Deleted]

8. [Deleted]

9. [Deleted]

10. [Deleted]

CHAPTER 10

10. GLOSSARY

AARR

The *aggregate annual revenue requirement* for *prescribed transmission services.*

abnormal conditions

A condition described in clause 4.2.3A(a).

above-standard system shared transmission service

A *shared transmission service* that exceeds the requirements referred to in paragraph (a)(1) or (2) of the definition of *negotiated transmission service* principally as a consequence of investments that have *system-wide benefits*.

ACCC

Australian Competition and Consumer Commission as established under the Trade Practices Act 1974 (Cth).

acceptable credit criteria

The credit criteria defined in clause 3.3.3.

acceptable credit rating

The credit rating determined by *AEMO* under clause 3.3.4.

accepted restriction offer

A *restriction offer* accepted by *AEMO* in accordance with the *restriction offer procedures.*

access charge

For a *Transmission Network Service Provider* - an amount described in clause 5.4A(g)-(j).

For a *Distribution Network Service Provider* - in respect of access to:

(a) *negotiated distribution services* which would have been *negotiated distribution services* regardless of the operation of clause 6.24.2(c), an amount described in clause 5.5(f)(4); and

(b) *negotiated distribution services* which would have been treated as *negotiated transmission services* were it not for the operation of clause 6.24.2(c), an amount described in clause 5.4A(g)-(j).

access standard

Either an *automatic access standard* or a *negotiated access standard* for a particular technical requirement as recorded in a *connection agreement*.

Accredited Service Provider category

A category of registration of a *Metering Provider* established by *AEMO* under S7.4.2(b) as a consequence of requirements of a *participating jurisdiction* to install *metering installations*.

accumulated energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data represents a period in excess of a *trading interval*. The measurement is carried out at a *metering point*.

activate, activated, activation

The operation of a *generating unit* (other than a *scheduled generating unit*) at an increased *loading level* or reduction in demand (other than a *scheduled load*) undertaken in response to a request by *AEMO* in accordance with an *unscheduled reserve contract*.

active energy

A measure of electrical energy flow, being the time integral of the product of *voltage* and the in-phase component of current flow across a *connection point*, expressed in watthour (Wh).

active power

The rate at which *active energy* is transferred.

active power capability

The maximum rate at which *active energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

additional intervention claim

Has the meaning given in clause 3.12.2(k).

adequately damped

In relation to a *control system*, when tested with a step change of a feedback input or corresponding reference, or otherwise observed, any oscillatory response at a *frequency* of:

(a) 0.05 Hz or less, has a damping ratio of at least 0.4;

(b) between 0.05 Hz and 0.6 Hz, has a halving time of 5 seconds or less (equivalent to a damping coefficient –0.14 nepers per second or less); and

(c) 0.6 Hz or more, has a damping ratio of at least 0.05 in relation to a *minimum access standard* and a damping ratio of at least 0.1 otherwise.

ADJR Act

The Administrative Decisions (Judicial Review) Act 1977 (Cth).

adjusted gross energy

The *energy* adjusted in accordance with clause 3.15.5 (for a *transmission network connection point*) or clause 3.15.5A (for a *virtual transmission node*) or clause 3.15.4 (for any other *connection point*).

administered floor price

A price floor to apply to a *regional reference price*, with the levels of the price floor being administered under clause 3.14.1 and the circumstances under which it can be invoked by *AEMO* being determined as set out in clause 3.14.2.

administered price cap

A price cap to apply to a *dispatch price*, *regional reference price* or *ancillary service price*, with the levels of the price cap being set in accordance with clause 3.14.1 and the circumstances under which it can be invoked by *AEMO* being determined as set out in clause 3.14.2.

administered price period

A period declared by *AEMO*, in accordance with clause 3.14.2, in which an *administered price cap* may be invoked.

Adviser

The Dispute Resolution Adviser specified in clause 8.2.2(a).

Adviser referral notice

A notice referring a dispute to the *Adviser* for the purposes of clause 8.2.5.

AEMC

The Australian Energy Market Commission, which is established under section 5 of the Australian Energy Market Commission Establishment Act 2004 (SA).

AEMO

National Electricity Market Management Company Limited A.C.N. 072 010 327.

AEMO co-ordinating centre

The control centre from which *AEMO* conducts *market* related activities and the coordination of the operation of the *national grid.*

AEMO intervention event

An event where *AEMO* intervenes in the *market* under the *Rules* by:

(a) issuing a *direction* in accordance with clause 4.8.9; or

(b) exercising the *reliability and emergency reserve trader* in accordance with rule 3.20 by:

(1) *dispatching scheduled generating units*, *scheduled network services* or *scheduled loads* in accordance with a *scheduled reserve contract*; or

(2) *activating loads* or *generating units* under an *unscheduled reserve contract*.

AEMO power system security responsibilities

The responsibilities described in clause 4.3.1.

AER

The Australian Energy Regulator, which is established by section 44AE of the Trade Practices Act 1974 (Cth).

affected participant's adjustment claim

Has the meaning given in clause 3.12.2(g)(3).

Affected Participant

(a) In respect of a particular *direction* in an *intervention price trading interval*:

(1) a *Scheduled Generator* or *Scheduled Network Service Provider*:

(i) which was not the subject of the *direction*, that had its *dispatched* quantity affected by that *direction*; or

(ii) which was the subject of the *direction*, that had its *dispatched* quantity for other *generating units* or other services which were not the subject of that *direction* affected by that *direction*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not the subject of that *direction*; or

(2) an *eligible person* entitled to receive an amount from *AEMO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units

for the *intervention price trading interval*, as a result of the *direction*; and

(b) in relation to the exercise of the *RERT* under rule 3.20:

(1) a *Scheduled Generator* or *Scheduled Network Service Provider*:

(i) whose *plant* or *scheduled network service* was not *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity affected by the *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*; and

(ii) who was not the subject of *activation* under an *unscheduled reserve contract*, that had its *dispatched* quantity affected by the *activation* of *generating units* or *loads* under that *unscheduled reserve contract*;

(2) a *Scheduled Generator* or *Scheduled Network Service Provider* whose *plant* or *scheduled network service* was *dispatched* under a *scheduled reserve contract*, that had its *dispatched* quantity for other *generating units* or other services which were not *dispatched* under the *scheduled reserve contract* affected by that *dispatch* of *plant* or *scheduled network service* under that *scheduled reserve contract*, however, the *Scheduled Generator* or *Scheduled Network Service Provider* is only an *Affected Participant* in respect of those *generating units* and services which were not *dispatched* under that *scheduled reserve contract*; or

(3) an *eligible person* entitled to receive an amount from *AEMO* pursuant to clause 3.18.1(b)(1) where there has been a change in flow of a *directional interconnector*, for which the *eligible person* holds units for the *intervention price trading interval*, as a result of the *dispatch* of *plant* or *scheduled network service* under a *scheduled reserve contract* or the *activation* of *generating units* or *loads* under an *unscheduled reserve contract*.

agency data collection system

The system used by the operator of an *agency metering database* to collect, process and transfer the *metering data* from a *meter* to the *AEMO settlements* process.

agency metering database

A *metering database* which is operated under a service level agreement with *AEMO*.

aggregate annual revenue requirement

For *prescribed transmission services,* the meaning in clause 6A.22.1 and for any other service, the calculated total annual revenue to be earned by an entity for a defined class or classes of service.

aggregate payment due

The aggregate of the net amounts payable by *AEMO* to each of the *Market Participants* to whom payments are to be made in relation to *spot market transactions* or *reallocation transactions* in respect of a *billing period* determined in accordance with clause 3.15.22(c).

agreed capability

In relation to a *connection point*, the capability to receive or send out power for that *connection point* determined in accordance with the relevant *connection agreement*.

alternative control service

A *distribution service* that is a *direct control service* but not a *standard control service*.

Amending Rule

A Rule made by the *AEMC* under section 103 of the *National Electricity Law* on and from the date of commencement of the operation of that Rule, or parts of that Rule.

ancillary service fees

The fees determined by *AEMO* under Chapter 2 in relation to *ancillary services.*

ancillary service generating unit

A *generating unit* which has been classified in accordance with Chapter 2 as an *ancillary service generating unit.*

ancillary service load

A *market load* which has been classified in accordance with Chapter 2 as an *ancillary service load.*

ancillary service price

In respect of a *dispatch interval*, for a *market ancillary service,* the common clearing price for the *market ancillary service* determined in accordance with clause 3.9.

Ancillary Service Provider

A person who engages in the activity of owning, controlling or operating a *generating unit* or *market load* classified in accordance with Chapter 2 as an *ancillary service generating unit* or *ancillary service load*, as the case may be.

ancillary services

Market ancillary services and *non-market ancillary services.*

ancillary services agreement

An agreement under which a *Registered Participant* agrees to provide one or more *non-market ancillary services* to *AEMO*.

annual building block revenue requirement

The amount representing the revenue requirement of a *Transmission Network Service Provider* for each *regulatory year* of a *regulatory control period* calculated in accordance with clause 6A.5.4.

Annual Planning Report

A report prepared by a *Transmission Network Service Provider* under clause 5.6.2A(a).

annual revenue requirement

An amount representing revenue for a *Distribution Network Service Provider*, for each *regulatory year* of a *regulatory control period*, calculated in accordance with Part C of Chapter 6.

annual service revenue requirement

Has the meaning set out in clause 6A.22.2.

apparent power

The square root of the sum of the squares of the *active power* and the *reactive power*.

applicable regulatory instruments

All laws, regulations, orders, licences, codes, determinations and other regulatory instruments (other than the *Rules*) which apply to *Registered Participants* from time to time, including those applicable in each *participating jurisdiction* as listed below, to the extent that they regulate or contain terms and conditions relating to access to a *network*, *connection* to a *network*, the provision of *network services*, *network service* price or *augmentation* of a *network*.

(1) New South Wales:

(a) the Electricity Supply Act 1995 ("ES Act");
(b) all regulations made and licences ("Licences") issued under the ES Act;
(c) the Independent Pricing and Regulatory Tribunal Act 1992 ("IPART Act");
(d) all regulations and determinations made under the IPART Act;
(e) all regulatory instruments applicable under the Licences; and
(f) the Commercial Arbitration Act 1984.

(2) Victoria:

(a) the Electricity Industry Act 2000 ("EI Act");
(b) all regulations made and licences ("Licences") issued under the EI Act;
(c) the Essential Services Commission Act 2001 ("ESCV Act");
(d) all regulations and determinations made under the ESCV Act;
(e) all regulatory instruments applicable under the Licences; and
(f) the Tariff Order made under section 158A(1) of the Electricity Industry Act 1993 and continued in effect by clause 6(1) of Schedule 4 to the Electricity Industry (Residual Provisions) Act 1993, as amended or varied in accordance with section 14 of the EI Act.

(3) South Australia:

(a) the Electricity Act 1996;
(b) all regulations made and licences ("Licences") issued under the Electricity Act;
(c) the Essential Services Commission Act 2002 ("ESCSA Act");
(d) all regulations and determinations made under the ESCSA Act;
(e) all regulatory instruments applicable under the Licences; and
(f) the Electricity Pricing Order made under section 35B of the Electricity Act.

(4) Australian Capital Territory:

(a) the Utilities Act 2000;
(b) all regulations made and licences ("Licences") issued under the Utilities Act;
(c) the Independent Competition and Regulatory Commission Act 1997 ("ICRC Act");
(d) all regulations and determinations made under the ICRC Act; and
(e) all regulatory instruments applicable under the Licences.

(5) Queensland:

(a) the Electricity Act 1994;
(b) all regulations made and authorities and special approvals ("Licences") granted under the Electricity Act;
(c) the Queensland Competition Authority Act 1997 ("QCA Act");
(d) all regulations and determinations made under the QCA Act;
(e) all regulatory instruments applicable under the Licences; and
(f) the Gladstone Power Station Agreement Act 1993 and associated agreements.

(6) Tasmania:

(a) the Electricity Supply Industry Act 1995;
(b) all regulations made and licences ("Licences") issued under the Electricity Supply Industry Act;
(c) all regulatory instruments under the Electricity Supply Industry Act or the Licences (including, without limitation, determinations of the Tasmanian Electricity Regulator under the Electricity Supply Industry (Price Control) Regulations); and

(d) the Tasmanian Electricity Code issued under section 49A of the Electricity Supply Industry Act.

application to connect

An application made by a *Connection Applicant* in accordance with clause 5.3 for *connection* to a *network* and/or the provision of *network services* or modification of a *connection* to a *network* and/or the provision of *network services*.

approved pass through amount

In respect of a *positive change event* for a *Transmission Network Service Provider*:

(a) the amount which the *AER* determines should be passed through to *Transmission Network Users* under clause 6A.7.3(d)(2); or

(b) the amount which the *AER* is taken to have determined under clause 6A.7.3(e)(1),

as the case may be.

In respect of a *positive change event* for a *Distribution Network Service Provider*:

(a) the amount the *AER* determines should be passed through to *Distribution Network Users* under clause 6.6.1(d)(2); or

(b) the amount the *AER* is taken to have determined under clause 6.6.1(e)(3),

as the case may be.

approved pricing proposal

A *pricing proposal* approved by the *AER.*

ASRR

The *annual service revenue requirement.*

asynchronous generating unit

A *generating unit* that is not a *synchronous generating unit*.

attributable connection point cost share

Has the meaning set out in clause 6A.22.4.

attributable cost share

Has the meaning set out in clause 6A.22.3.

auction

A *settlement residue* auction held under clause 3.18.

auction amounts

All amounts:

(1) payable to *AEMO* or *eligible persons* under *SRD agreements*; or

(2) distributed to *Network Service Providers* under clause 3.18.4; or

(3) recovered by *AEMO* under clause 3.18.4 or the *auction rules*.

auction expense fees

The costs and expenses incurred by *AEMO* referred to in clause 3.18.4(b).

auction participation agreement

Has the meaning given in clause 3.18.1(a).

auction rules

The rules developed by *AEMO* under clause 3.18.3, as amended from time to time in accordance with that clause.

augmentation

Has the meaning given in the *National Electricity Law*.

augmentation technical report

A report on *augmentation* under clause 5.6.3

Australian Standard (AS)

The most recent edition of a standard publication by Standards Australia (Standards Association of Australia).

Authority

Any government, government department, instrumentality, *Minister*, agency, statutory authority or other body in which a government has a controlling interest, and includes the *AEMC*, *AEMO*, the *AER* and the *ACCC* and their successors.

automatic access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as an automatic access standard for that technical requirement, such that a *plant* that meets that standard would not be denied access because of that technical requirement.

automatic generation control system (AGC)

The system into which the *loading levels* from economic *dispatch* will be entered for *generating units* operating on automatic generation control in accordance with clause 3.8.21(d).

automatic reclose equipment

In relation to a *transmission line* or *distribution line*, the equipment which automatically recloses the relevant line's circuit breaker(s) following their opening as a result of the detection of a fault in the *transmission line* or the *distribution line* (as the case may be).

available capacity

The total MW capacity available for *dispatch* by a *scheduled generating unit*, *semi-scheduled generating unit* or *scheduled load* (i.e. maximum plant availability) or, in relation to a specified *price band*, the MW capacity within that *price band* available for *dispatch* (i.e. availability at each price band).

average electrical energy loss

The volume-weighted average of the *electrical energy losses* incurred in each *trading interval* over all *trading intervals* in a defined period of time

average loss factor

A multiplier used to describe the *average electrical energy loss* for electricity used or transmitted.

avoided Customer TUOS charges

The charges described in rule 5.5(h).

B2B Communications

Communications between *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* relating to an end-user or *supply* to an end-user provided for in the *B2B Procedures*.

B2B Data

Data relating to *B2B Communications*.

B2B Decision

A decision of *AEMO* to approve or not approve an *Information Exchange Committee Recommendation*.

B2B Determination Dispute

A dispute in relation to either a *B2B Decision* or an *Information Exchange Committee Recommendation*.

B2B e-Hub

An electronic information exchange platform established by *AEMO* to facilitate *B2B Communications*.

B2B Objective

The benefits from *B2B Communications* to *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* as a whole should outweigh the detriments to *Local Retailers*, *Market Customers* and *Distribution Network Service Providers* as a whole.

B2B Principles

The following principles:

(a) *B2B Procedures* should provide a uniform approach to *B2B Communications* in *participating jurisdictions* in which there are no *franchise customers*;
(b) *B2B Procedures* should detail operational and procedural matters and technical requirements that result in efficient, effective and reliable *B2B Communications*;
(c) *B2B Procedures* should avoid unreasonable discrimination between *Local Retailers*, *Market Customers* and *Distribution Network Service Providers*; and
(d) *B2B Procedures* should protect the confidentiality of commercially sensitive information.

B2B Procedures

Procedures prescribing the content of, the processes for, and the information to be provided to support, *B2B Communications*.

B2B Procedures Change Pack

A document consisting of:

(a) a *B2B Proposal*;
(b) a report setting out an overview of the likely impact of the *B2B Proposal* on *AEMO*, *Local Retailers*, *Market Customers* and *Distribution Network Service Providers*;
(c) draft *B2B Procedures* (incorporating proposed changes in mark up, where appropriate); and
(d) an issues paper explaining why the *B2B Proposal* is being presented.

B2B Proposal

A proposal for *B2B Procedures*, or a *change* to the *B2B Procedures*, which is the subject of consultation by the *Information Exchange Committee*.

bank bill rate

On any *day*, the rate determined by *AEMO* (having regard to such market indicators as *AEMO* in its discretion selects) to be the market rate as at 10.00 am on that *day* (or if not a *business day*, on the previous *business day*) for Australian dollar denominated bank accepted bills of exchange having a tenor of 30 *days*.

billing period

The period of 7 *days* commencing at the start of the *trading interval* ending 12.30 am Sunday.

black start capability

A capability that allows a *generating unit*, following its *disconnection* from the *power system*, to be able to deliver electricity to either:

(a) its *connection point*; or

(b) a suitable point in the *network* from which *supply* can be made available to other *generating units*,

without taking *supply* from any part of the *power system* following *disconnection*.

black system

The absence of *voltage* on all or a significant part of the *transmission system* or within a *region* during a *major supply disruption* affecting a significant number of customers.

breaker fail

In relation to a *protection system*, that part of the *protection system* that protects a *Market Participant's facilities* against the non-operation of a circuit breaker that is required to open.

breaker fail protection system

A *protection system* that protects a *facility* against the non-operation of a circuit breaker that is required to open to clear a fault.

building block determination

The component of a distribution determination relevant to the regulation of *standard control services* (See rule 6.3).

building block proposal

For a *Distribution Network Service Provider*, the part of the provider's *regulatory proposal* relevant to the regulation of *standard control services* (See clause 6.3.1).

busbar

A common *connection point* in a *power station switchyard* or a *transmission network substation*.

business day

A *day* other than a Saturday, Sunday or a *day* which is lawfully observed as a national public holiday on the same *day* in each of the *participating jurisdictions*.

call amount

The amount determined pursuant to the formula in clause 3.3.11 for the purposes of a *call notice* where the *outstandings* of a *Market Participant* exceed its *trading limit*.

call notice

A notice issued by *AEMO* pursuant to clause 3.3.11 where the *outstandings* of a *Market Participant* exceed its *trading limit*.

capacitor bank

Electrical equipment used to generate *reactive power* and therefore support *voltage* levels on *distribution* and *transmission lines* in periods of high *load*.

capital expenditure criteria

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.7(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.7(c)(1)–(3).

capital expenditure factors

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.7(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.7(e)(1)–(10).

capital expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.7(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.7(a).

cascading outage

The occurrence of an uncontrollable succession of *outages*, each of which is initiated by conditions (e.g. instability or overloading) arising or made worse as a result of the event preceding it.

categories of prescribed transmission services

For the purposes of pricing for *prescribed transmission services*:

(a) *prescribed entry services*;

(b) *prescribed exit services*;

(c) *prescribed common transmission services*; and

(d) *prescribed TUOS services*.

central dispatch

The process managed by *AEMO* for the *dispatch* of *scheduled generating units, semi-scheduled generating units, scheduled loads, scheduled network services* and *market ancillary services* in accordance with rule 3.8.

change

Includes amendment, alteration, addition or deletion.

changeover date

Has the meaning given in the *National Electricity Law*.

charging parameters

The constituent elements of a tariff.

check meter

A *meter*, other than a *revenue meter*, used as a source of *metering data* for Type 1 and Type 2 *metering installations* as specified in schedule 7.2.

check metering data

The *metering data* obtained from a *check metering installation*.

check metering installation

A *metering installation* used as the source of *metering data* for validation in the *settlements* process.

clause 4.8.9 instruction

Has the meaning given in clause 4.8.9(a1)(2).

COAG

Council of Australian Governments.

commercial arbitrator

A dispute resolution panel (within the meaning of section 58 of the *National Electricity Law*) established pursuant to clause 6A.30.2(b).

commitment

The commencement of the process of starting up and *synchronising* a *generating unit* to the *power system*.

common service

A service that ensures the integrity of a *distribution system* and benefits all *Distribution Customers* and cannot reasonably be allocated on a locational basis.

communication link

All communications equipment, processes and arrangements that lie between the *meter* and the *data logger,* where the *data logger* is external to the device that contains the *measurement elements*, and/or the *data logger* and the telecommunications network.

compensation recovery amount

Has the meaning given in clause 3.15.8(a).

complainant

The party which refers a dispute to the *Adviser* in accordance with clause 8.2.5(a).

confidential information

In relation to a *Registered Participant* or *AEMO*, information which is or has been provided to that *Registered Participant* or *AEMO* under or in connection with the *Rules* and which is stated under the *Rules*, or by *AEMO*, the *AER* or the *AEMC*, to be *confidential information* or is otherwise confidential or commercially sensitive. It also includes any information which is derived from such information.

connect, connected, connection

To form a physical link to or through a *transmission network* or *distribution network*.

connection agreement

An agreement between a *Network Service Provider* and a *Registered Participant* or other person by which the *Registered Participant* or other person is *connected* to the *Network Service Provider's transmission* or *distribution network* and/or receives *transmission services* or *distribution services*. In some *participating jurisdictions*, the *Registered Participant* or other person may have one *connection agreement* with a *Network Service Provider* for *connection services* and another agreement with a different *Network Service Provider* for *network services* provided by the *transmission network*.

Connection Applicant

A person who wants to establish or modify *connection* to a *transmission network* or *distribution network* and/or who wishes to receive *network services* and who makes a *connection* enquiry as described in clause 5.3.2.

connection assets

Those components of a *transmission or distribution system* which are used to provide *connection services*.

connection point

The agreed point of *supply* established between *Network Service Provider*(s) and another *Registered Participant, Non-Registered Customer* or *franchise customer*.

connection service

An *entry service* (being a service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*) or an *exit service* (being a service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*).

considered project

(a) In respect of a *transmission network augmentation*, a project that meets the following criteria:

(1) the *Network Service Provider* has acquired the necessary land and easements;

(2) the *Network Service Provider* has obtained all necessary planning and development approvals;

(3) as applicable:

(i) the *augmentation* project has passed the *regulatory investment test for transmission*;

(ii) the *augmentation* has passed the *regulatory test*;

(iii) in respect of a *transmission investment* which has not been subject to a *regulatory investment test for transmission* or the *regulatory test*, an intention to proceed with the project has been published in the *Network Service Provider's Annual Planning Report*; or

(4) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.

(b) In respect of a *distribution network augmentation*, a project that meets the following criteria:

(1) the *Network Service Provider* has acquired the necessary land and easements;

(2) the *Network Service Provider* has obtained all necessary planning and development approvals; and

(3) construction has either commenced or the *Network Service Provider* has set a firm date for it to commence.

constrained off

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited below the level to which it would otherwise have been *dispatched* by *AEMO* on the basis of its *dispatch offer*.

constrained on

In respect of a *generating unit*, the state where, due to a *constraint* on a *network*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by *AEMO* on the basis of its *dispatch offer*.

constraint, constrained

A limitation on the capability of a *network, load* or a *generating unit* such that it is unacceptable to either transfer, consume or generate the level of electrical power that would occur if the limitation was removed.

consulting party

The person who is required to comply with the *Rules consultation procedures*.

contestable

(a) In relation to *transmission services* a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Transmission Network Service Provider* as a contestable service or on a competitive basis.

(b) In relation to *distribution services,* a service which is permitted by the laws of the relevant *participating jurisdiction* to be provided by more than one *Distribution Network Service Provider* as a contestable service or on a competitive basis.

contingency capacity reserve

Actual *active* and *reactive energy* capacity, *interruptible load* arrangements and other arrangements organised to be available to be utilised on the actual occurrence of one or more *contingency events* to allow the restoration and maintenance of *power system security.*

contingency capacity reserve standards

The standards set out in the *power system security and reliability standards* to be used by *AEMO* to determine the levels of *contingency capacity reserves* necessary for *power system security*.

contingency event

An event described in clause 4.2.3(a).

contingent project

In relation to a *revenue determination*, a *proposed contingent project* that is determined by the *AER*, in accordance with clause 6A.8.1(b), to be a *contingent project* for the purposes of that *revenue determination*.

continuous uninterrupted operation

In respect of a *generating system* or operating *generating unit* operating immediately prior to a *power system* disturbance, not *disconnecting* from the *power system* except under its *performance standards* established under clauses S5.2.5.8 and S5.2.5.9 and, after clearance of any electrical fault that caused the disturbance, only substantially varying its *active power* and *reactive power* required by its *performance standards* established under clauses S5.2.5.11, S5.2.5.13 and S5.2.5.14, with all essential auxiliary and *reactive plant* remaining in service, and responding so as to not exacerbate or prolong the disturbance or cause a subsequent disturbance for other *connected plant*.

control centre

The *facilities* used by *AEMO* for managing *power system security* and administering the *market*.

control system

Means of monitoring and controlling the operation of the *power system* or equipment including *generating units connected* to a *transmission* or *distribution network*.

Co-ordinated Universal Time (UTC)

The time as determined by the International Bureau of Weights and Measures and maintained under section 8AA of the *National Measurement Act.*

Co-ordinating Network Service Provider

A *Network Service Provider* appointed by multiple *Transmission Network Service Providers* to allocate *AARR* in accordance with rule 6A.29.

Cost Allocation Guidelines

For a *Transmission Network Service Provider* – the guidelines referred to in clause 6A.19.3.

For a *Distribution Network Service Provider* – the guidelines referred to in clause 6.15.3.

Cost Allocation Method

For a *Distribution Network Service Provider*, the Cost Allocation Method approved by the *AER* for that *Distribution Network Service Provider* under clause 6.15.4(c) and (d) as amended from time to time in accordance with clause 6.15.4(f) and (g).

Cost Allocation Methodology

For a *Transmission Network Service Provider*, the Cost Allocation Methodology approved or taken to be approved by the *AER* for that *Transmission Network Service Provider* under clauses 6A.19.4(c) and (d) as amended from time to time in accordance with clauses 6A.19.4(f) and (g).

Cost Allocation Principles

For a *Transmission Network Service Provider* – the principles set out in clause 6A.19.2.

For a *Distribution Network Service Provider* – the principles set out in clause 6.15.2.

cost reflective network pricing

A cost allocation method which reflects the value of assets used to provide *transmission* or *distribution services* to *Network Users*.

cost reflective network pricing methodology or CRNP methodology or modified CRNP methodology

The cost allocation methodologies described in schedule 6A.3.

cost threshold

Has the meaning given in clause 5.6.5E(a).

cost threshold consultation period

Has the meaning given in clause 5.6.5E(d).

cost threshold determination

Has the meaning given in clause 5.6.5E(f).

cost threshold review

Has the meaning given in clause 5.6.5E(a).

CPI

As at a particular time, the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the most recent quarter that precedes that particular time and for which the index referred to has been published by the Australian Bureau of

Statistics as at that time. If that index ceases to be published or is substantially changed, *CPI* will be such other index as is determined by the *AER* as a suitable benchmark for recording general movements in prices.

credible contingency event

An event described in clause 4.2.3(b), certain examples of which are set out in schedule 5.1.

credible option

Has the meaning given in clause 5.6.5D(a).

credit period

The typical period of days over which *maximum credit limit* is calculated in accordance with schedule 3.3.

credit support

An obligation owed to *AEMO* by a third party supporting the obligations of a *Market Participant* and having the characteristics required by clause 3.3.2.

credit support provider

The issuing party that assumes obligations to *AEMO* pursuant to a *credit support*.

cumulative price threshold

The threshold for imposition of an *administered price cap* as defined in clause 3.14.1.

current rating

The maximum current that may be permitted to flow (under defined conditions) through a *transmission line* or *distribution line* or other item of equipment that forms part of a *power system.*

current transformer (CT)

A *transformer* for use with *meters* and/or protection devices in which the current in the secondary winding is, within prescribed error limits, proportional to and in phase with the current in the primary winding.

Customer

A person who:

1. engages in the activity of purchasing electricity *supplied* through a *transmission or distribution system* to a *connection point*; and

2. is registered by *AEMO* as a *Customer* under Chapter 2.

Customer transmission use of system, Customer transmission use of system service

A service provided to a *Transmission Network User* for use of the *transmission network* for the conveyance of electricity (including where it has been negotiated in accordance with clause 5.4A(f)(3)) that can be reasonably allocated to a *Transmission Network User* on a locational basis, but does not include *Generator transmission use of system services*.

data collection system

All equipment and arrangements that lie between the *metering database* and the point where the *metering data* enters the *telecommunications network*.

data logger

A *metering installation* database or a device that collects electronic signals from a *measurement element* and packages it into 30 minute intervals (or sub-multiples). This device may contain data storage capability, be a separate item of equipment, and/or be combined with the *energy* measuring components within one physical device.

day

Unless otherwise specified, the 24 hour period beginning and ending at midnight Eastern Standard Time (EST).

declared NEM project

A project determined to be a declared NEM project under clause 2.11.1(ba) or 2.11.1(bd), for which there is special treatment in the timing of cost recovery.

declared shared network

Has the meaning given in the *National Electricity Law*.

declared transmission system operator

Has the meaning given in the *National Electricity Law*.

decommission, decommit

In respect of a *generating unit*, ceasing to generate and *disconnecting* from a *network*.

default dispatch bid

A *dispatch bid* made pursuant to clause 3.8.9.

default dispatch offer

A *dispatch offer* made pursuant to clause 3.8.9.

default event

An event defined as such in clause 3.15.21(a).

default notice

A notice issued by *AEMO* pursuant to clause 3.15.21(b)(1).

defaulting Market Participant

A *Market Participant* in relation to which a *default event* has occurred.

delayed lower service

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from *AEMO* in order to lower that *frequency* to within the *normal operating frequency band*.

delayed raise service

The service of providing, in accordance with the *market ancillary service specification*, the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to a change in the *frequency* of the *power system* beyond a threshold or in accordance with electronic signals from *AEMO* in order to raise that *frequency* to within the *normal operating frequency band.*

delayed response capacity reserve

That part of the *contingency capacity reserve* capable of realisation within 5 minutes of a major *frequency* decline in the *power system* as described further in the *power system security and reliability standards*.

delayed service

A *delayed raise service* or a *delayed lower service*.

demand based price

A price expressed in dollars per kilowatt per time period or dollars per kilovolt ampere per time period.

demand management incentive scheme

An incentive scheme for certain *Distribution Network Service Providers* developed and *published* by the *AER* under clause 6.6.3.

deprival value

A value ascribed to assets which is the lower of economic value or optimised depreciated replacement value.

derogation

Has the meaning given in the *National Electricity Law.*

de-synchronising/de-synchronisation

The act of *disconnection* of a *generating unit* from the *connection point* with the *power system*, normally under controlled circumstances.

direct control service

A *distribution service* that is a direct control network service within the meaning of section 2B of the Law.

Directed Participant

A *Scheduled Generator*, *Semi-Scheduled Generator, Market Generator*, *Scheduled Network Service Provider* or *Market Customer* the subject of a *direction*.

direction

Has the meaning given in clause 4.8.9(a1)(1).

directional interconnector

Has the meaning given in clause 3.18.1(c).

Disclosee

In relation to a *Registered Participant* or *AEMO*, a person to whom that *Registered Participant* discloses *confidential information.*

disconnect, disconnected, disconnection

The operation of switching equipment or other action so as to prevent the flow of electricity at a *connection point*.

dispatch

The act of initiating or enabling all or part of the response specified in a *dispatch bid*, *dispatch offer* or *market ancillary service offer* in respect of a *scheduled generating unit, semi-scheduled generating unit,* a *scheduled load,* a *scheduled network service*, an *ancillary service generating unit* or an *ancillary service load* in accordance with rule 3.8, or a *direction* or operation of capacity the subject of a *reserve contract* as appropriate.

dispatch algorithm

The algorithm used to determine *central dispatch* developed by *AEMO* in accordance with clause 3.8.1(d).

dispatch bid

A notice submitted by a *Market Participant* to *AEMO* relating to the *dispatch* of a *scheduled load* in accordance with clause 3.8.7.

dispatch inflexibility profile

Data which may be provided to *AEMO* by *Market Participants,* in accordance with clause 3.8.19, to specify *dispatch inflexibilities* in respect of *scheduled loads* or *scheduled generating units* which are not *slow start generating units*.

dispatch instruction

An instruction given to a *Registered Participant* under clauses 4.9.2, 4.9.2A, 4.9.3 or 4.9.3A.

dispatch interval

A period defined in clause 3.8.21(a1) in which the *dispatch algorithm* is run in accordance with clause 3.8.21(b).

dispatch level

Means:

(1) for a *semi-dispatch interval*, the amount of electricity specified in a *dispatch instruction* as the *semi-scheduled generating unit's* maximum permissible *active power* at the end of the *dispatch interval* specified in the *dispatch instruction*; and

(2) for a *non semi-dispatch interval*, an estimate of the *active power* at the end of the *dispatch interval* specified in the *dispatch instruction.*

dispatch offer

A *generation dispatch offer* or a *network dispatch offer*.

dispatch offer price

The price submitted by a *Scheduled Generator*, *Semi-Scheduled Generator* or a *Scheduled Network Service Provider* for a *price band* and a *trading interval* in a *dispatch offer*.

dispatch optimisation software

The computer program used by *AEMO* for computing the *dispatch algorithm*.

dispatch price

The price determined for each *regional reference node* by the *dispatch algorithm* each time it is run by *AEMO*.

dispatched generating unit

A *scheduled generating unit* which has received instructions from *AEMO* in accordance with a *dispatch* schedule.

dispatched generation

The *generation* which has been *dispatched* as part of *central dispatch.*

dispatched Generator

A *Generator* who has received a *dispatch instruction* from *AEMO*.

dispatched load

The *load* which has been *dispatched* as part of *central dispatch.*

dispute management system (or "DMS")

The dispute management system which each *Registered Participant* and *AEMO* must adopt in accordance with clause 8.2.3.

dispute notice

Has the meaning given in clause 5.6.6A(c)(1).

dispute resolution panel (or "DRP")

A dispute resolution panel established pursuant to clause 8.2.6A.

disputing party

Has the meaning given in clause 5.6.6A(c).

distribution

Activities pertaining to a *distribution system* including the conveyance of electricity through that *distribution system*.

distribution consultation procedures

The procedures set out in Part G of Chapter 6.

Distribution Customer

A *Customer, Distribution Network Service Provider, Non-Registered Customer* or *franchise customer* having a *connection point* with a *distribution network*.

distribution line

A power line, including underground cables, that is part of a *distribution network*.

distribution loss factor

An *average loss factor* calculated according to clause 3.6.3.

distribution losses

Electrical energy losses incurred in distributing electricity over a *distribution network.*

distribution network

A *network* which is not a *transmission network*.

distribution network connection point

A *connection point* on a *distribution network*.

Distribution Network Service Provider

A person who engages in the activity of owning, controlling, or operating a *distribution system*.

Distribution Network Service Provider Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

Distribution Network User

A *Distribution Customer* or an *Embedded Generator*.

distribution network user access

The *power transfer capability* of the *distribution network* in respect of:

(a) *generating units* or a group of *generating units*; and

(b) *network elements*,

at a *connection point* which has been negotiated in accordance with rule 5.5.

Distribution Ring-Fencing Guidelines

The guidelines developed by the *AER* under clause 6.17.2.

distribution service

A service provided by means of, or in connection with, a *distribution system*.

distribution services access dispute

A dispute referred to in clause 6.22.1.

distribution standard control service revenue

Has the meaning given in rule 6.26(b)(2).

distribution system

A *distribution network,* together with the *connection assets* associated with the *distribution network,* which is connected to another *transmission or distribution system.*

Connection assets on their own do not constitute a *distribution system.*

Distribution System Operator

A person who is responsible, under the *Rules* or otherwise, for controlling or operating any portion of a *distribution system* (including being responsible for directing its operations during *power system* emergencies) and who is registered by *AEMO* as a *Distribution System Operator* under Chapter 2.

distribution use of system, distribution use of system service

A service provided to a *Distribution Network User* for use of the *distribution network* for the conveyance of electricity that can be reasonably allocated on a locational and/or *voltage* basis.

DMS

A dispute management system.

DMS Contact

A person appointed by a *Registered Participant* or *AEMO* pursuant to its *DMS* to be the first point of contact for the notification of disputes under clause 8.2.

DMS referral notice

A notice served on a *DMS Contact* pursuant to clause 8.2.4(a).

DRP

A *dispute resolution panel*.

dual function asset

Means any part of a *network* owned, operated or controlled by a *Distribution Network Service Provider* which operates between 66 kV and 220 kV and which operates in parallel, and provides support, to the higher voltage *transmission network* which is deemed by clause 6.24.2(a) to be a *dual function asset*. For the avoidance of doubt:

(a) a *dual function asset* can only be an asset which forms part of a *network* that is predominantly a *distribution network*; and

(b) an asset which forms part of a *network* which is predominantly a *transmission network* cannot be characterised as a *dual function asset*,

through the operation of clause 6.24.2(a).

dynamic performance

The response and behaviour of *networks* and *facilities* which are *connected* to the *networks* when the *satisfactory operating state* of the *power system* is disturbed.

EAAP guidelines

The guidelines *published* by *AEMO* in accordance with clause 3.7C(k) that *AEMO* must comply with in preparing the *EAAP*.

EAAP principles

The principles referred to in clause 3.7C(b) that *AEMO* must comply with in preparing the *EAAP* and the *EAAP guidelines*.

Eastern Standard Time (EST)

The time which is set at 10 hours in advance of *Co-ordinated Universal Time*.

efficiency benefit sharing scheme

For a *Transmission Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6A.5.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the *AER* under clause 6.5.8.

efficiency benefit sharing scheme parameters

For an *efficiency benefit sharing scheme*, those parameters that are *published* by the *AER* in respect of that scheme pursuant to clause 6A.6.5(c).

electrical energy loss

Energy loss incurred in the production, transportation and/or use of electricity.

electrical sub-network

A part of the *national grid* determined by *AEMO* in accordance with clause 3.11.4B.

electronic communication system

Includes the electronic communication and the *electronic data transfer* system provided to *Registered Participants* by *AEMO*.

electronic data transfer

The transfer of data by electronic means from one location to another.

eligible pass through amount

In respect of a *positive change event* for a *Transmission Network Service Provider*, the increase in costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has incurred and is likely to incur

until the end of the *regulatory control period* as a result of that *positive change event* (as opposed to the revenue impact of that event).

In respect of a *positive change event* for a *Distribution Network Service Provider*, the increase in costs in the provision of *direct control services* that the *Distribution Network Service Provider* has incurred and is likely to incur until the end of the *regulatory control period* as a result of that *positive change event* (as opposed to the revenue impact of that event).

eligible person

Has the meaning given in clause 3.18.2(b).

embedded generating unit

A *generating unit connected* within a *distribution network* and not having direct access to the *transmission network*.

Embedded Generator

A *Generator* who owns, operates or controls an *embedded generating unit*.

enabled

A *market ancillary service* is enabled when *AEMO* has selected the relevant *generating unit* or *load* for the provision of the *market ancillary service* and has notified the relevant *Market Participant* accordingly.

enablement limit

In relation to any *market ancillary service offer*, the level of associated *generation* or *load* (in MW) above or below which no response is specified as being available.

enabling price

Has the meaning given in clause 3.8.7A(d).

energise/energisation

The act of operation of switching equipment or the start-up of a *generating unit*, which results in there being a non-zero *voltage* beyond a *connection point* or part of the *transmission* or *distribution network*.

energy

Active energy and/or *reactive energy*.

energy adequacy assessment projection (EAAP)

A projection of *AEMO's* assessment of *energy* availability that accounts for *energy constraints* for each month over a 24 month period, which is prepared and *published* in accordance with rule 3.7C and is measured as *unserved energy* for each *region*.

energy based price

A price expressed in cents per kilowatt hour of *energy*.

energy constrained scheduled generating unit

A scheduled generating unit in respect of which the amount of electricity it is capable of *supplying* on a *trading day* is less than the amount of electricity it would *supply* on that *trading day* if it were *dispatched* to its full nominated availability for the whole *trading day*.

energy constrained scheduled load

A *scheduled load* in respect of which the amount of electricity it can take in a *trading day*, if *normally off*, or it can *off-load*, if *normally on*, is *constrained*.

energy constraint

A limitation on the ability of a *generating unit* or group of *generating units* to generate *active power* due to the restrictions in the availability of fuel or other necessary expendable resources such as, but not limited to, gas, coal, or water for operating turbines or for cooling.

energy conversion model

The model that defines how the *intermittent* input energy source (such as wind) is converted by the *semi-scheduled generating unit* into electrical output. That model must contain the information set out in the guidelines *published* by *AEMO* in accordance with clause 2.2.7(d).

energy data

Interval energy data or *accumulated energy data.*

energy data services

The services that involve:

(1) collation of *energy data* from the *meter* or *meter*/associated *data logger*;

(2) the processing of the *energy data* in the *metering installation* database;

(3) storage of the *energy data* in the *metering installation* database; and

(4) the provision of access to the data for those parties that have rights of access to the data.

energy packets

The value of *energy data* which is accumulated for a period of 30 minutes and stored as a separate data record.

energy support arrangement

A contractual arrangement between a *Generator* or *Network Service Provider* on the one hand, and a customer or *participating jurisdiction* on the other, under which *facilities* not subject to an *ancillary services agreement* for the provision of *system restart ancillary services* are used to assist *supply* to a customer during a *major supply disruption* affecting that customer, or customers generally in the *participating jurisdictions*, as the case may be.

entry charge

The charge payable by an *Embedded Generator* to a *Distribution Network Service Provider* for an *entry service* at a *distribution network connection point*.

entry cost

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *entry service* assets which provide *entry service* for the *connection point.*

entry service

A service provided to serve a *Generator* or a group of *Generators*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

estimated energy data

The data that results from an estimation of the flow of electricity in a power conductor where the data applies to a *trading interval* or a period in excess of a *trading interval*. The estimation is made in relation to a *market load* and would not apply to a *metering point* where *accumulated energy data* or *interval energy data* is not available, or an *unmetered connection point*.

excess generation

Aggregate *self dispatch level* of *self-committed generation* which is in excess of the quantity needed to meet the expected *power system demand* and *reserve* requirements.

excess generation period

A period made up of one or more *dispatch intervals* where the sum of the aggregate of *generating unit self dispatch levels* and the required *regulating capability* (which forms part of the *contingency capacity reserves standard*) exceeds the forecast *load* or actual *load* during those *dispatch intervals*.

excitation control system

In relation to a *generating unit,* the automatic *control system* that provides the field excitation for the generator of the *generating unit* (including excitation limiting devices and any power system stabiliser).

exit charge

The charge payable by a *Distribution Customer* to a *Distribution Network Service Provider* for *exit service* at a *distribution network connection point*.

exit cost

For each *distribution network connection point*, the amount of the *aggregate annual revenue requirement* for all individual assets classified as *exit service* assets which provide *exit service* for the *connection point.*

exit service

A service provided to serve a *Transmission Customer* or *Distribution Customer* or a group of *Transmission Customers* or *Distribution Customers*, or a *Network Service Provider* or a group of *Network Service Providers*, at a single *connection point*.

extension

An *augmentation* that requires the *connection* of a power line or *facility* outside the present boundaries of the *transmission* or *distribution network* owned, controlled or operated by a *Network Service Provider.*

extreme frequency excursion tolerance limits

In relation to the *frequency* of the *power system*, means the limits so described and specified in the *power system security and reliability standards*.

facilities

A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, typically:

(a) a *power station* or *generating unit*;

(b) a *substation* or *power station switchyard*;

(c) a *control centre* (being a *AEMO control centre*, or a *distribution* or *transmission network control centre*);

(d) facilities providing an *exit service*.

fast lower service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a rise in that *frequency*.

fast raise service

The service of providing, in accordance with the requirements of the *market ancillary service specification*, the capability of rapidly controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to arrest a fall in that *frequency*.

fault clearance time

In respect of a *fault type*, the time within which the *protection system* is designed, operated and maintained to clear a *short circuit fault* of that *fault type* within its protection zone.

fault type

One of the following types of electrical fault:

(a) three phase to ground fault;

(b) three phase fault;

(c) two phase to ground fault;

(d) phase to phase fault; and

(e) one phase to ground fault.

final statement

A statement issued by *AEMO* under clause 3.15.15 to a *Market Participant*.

financial year

A period commencing on 1 July in one calendar year and terminating on 30 June in the following calendar year.

financially responsible

In relation to any *market connection point*, a term which is used to describe the *Market Participant* which has either:

1. classified the *connection point* as one of its *market loads*;

2. classified the *generating unit connected* at that *connection point* as a *market generating unit;* or

3. classified the *network services* at that *connection point* as a *market network service.*

First-Tier Customer

A *Customer* which has classified any *load* as a *first-tier load* in accordance with Chapter 2.

first-tier load

Electricity purchased at a *connection point* directly and in its entirety from the *Local Retailer* and which is classified as a *first-tier load* in accordance with Chapter 2.

framework and approach paper

A document prepared and issued as a framework and approach paper under clause 6.8.1.

franchise customer

A person who does not meet its local jurisdiction requirements to make it eligible to be registered by *AEMO* as a *Customer* for a *load*.

frequency

For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

frequency operating standards

The standards which specify the *frequency* levels for the operation of the *power system* set out in the *power system security and reliability standards*.

frequency response mode

The mode of operation of a *generating unit* which allows automatic changes to the generated power when the *frequency* of the *power system* changes.

funded augmentation

A *transmission network augmentation* for which the *Transmission Network Service Provider* is not entitled to receive a charge pursuant to Chapter 6A.

GELF parameters

Variable parameters specific to a *Generator Energy Limitation Framework (GELF)* which are defined in the *EAAP guidelines* and supplement the *GELF*, and are submitted by a *Scheduled Generator* and updated in accordance with rule 3.7C for the purpose of the *EAAP*.

general purpose

The term applied by the National Measurement Institute to refer to the classification of a *meter*.

generated

In relation to a *generating unit*, the amount of electricity produced by the *generating unit* as measured at its terminals.

generating plant

In relation to a *connection point*, includes all equipment involved in generating electrical *energy*.

generating system

(a) Subject to paragraph (b), for the purposes of the *Rules*, a system comprising one or more *generating units*.

(b) For the purposes of clause 2.2.1(e)(3), clause 4.9.2, Chapter 5 and a *jurisdictional derogation* from Chapter 5, a system comprising one or more *generating units* and includes auxiliary or *reactive plant* that is located on the *Generator's* side of the *connection point* and is necessary for the *generating system* to meet its *performance standards*.

Generating System Design Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(1).

Generating System Model Guidelines

The guidelines *published* by *AEMO* under clause S5.5.7(a)(3).

Generating System Setting Data Sheet

The data sheet *published* by *AEMO* under clause S5.5.7(a)(2).

generating unit

The actual generator of electricity and all the related equipment essential to its functioning as a single entity.

generation

The production of electrical power by converting another form of energy in a *generating unit*.

generation centre

A geographically concentrated area containing a *generating unit* or *generating units* with significant combined generating capability.

generation dispatch offer

A notice submitted by a *Scheduled Generator* or *Semi-Scheduled Generator* to *AEMO* relating to the *dispatch* of a *scheduled generating unit* or a *semi-scheduled generating unit* in accordance with clause 3.8.6.

Generator

A person who engages in the activity of owning, controlling or operating a *generating system* that is *connected* to, or who otherwise *supplies* electricity to, a

transmission or *distribution system* and who is registered by *AEMO* as a *Generator* under Chapter 2 and, for the purposes of Chapter 5, the term includes a person who is required to, or intends to register in that capacity.

Generator Energy Limitation Framework (GELF)

A description of the *energy constraints* that affect the ability of a *scheduled generating unit* to generate electricity prepared in accordance with the *EAAP guidelines*.

Generator transmission use of system, Generator transmission use of system service

A service provided to a *Generator* for:

(a) use of the *transmission network* which has been negotiated in accordance with clause 5.4A(f)(3)(i); or

(b) use of a *transmission investment* for the conveyance of electricity that can be reasonably allocated to a *Generator* on a locational basis.

global market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

good electricity industry practice

The exercise of that degree of skill, diligence, prudence and foresight that reasonably would be expected from a significant proportion of operators of *facilities* forming part of the *power system* for the *generation*, *transmission* or *supply* of electricity under conditions comparable to those applicable to the relevant *facility* consistent with *applicable regulatory instruments*, *reliability*, safety and environmental protection. The determination of comparable conditions is to take into account factors such as the relative size, duty, age and technological status of the relevant *facility* and the *applicable regulatory instruments*.

governor system

The automatic *control system* which regulates the speed of the power turbine of a *generating unit* through the control of the rate of entry into the *generating unit* of the primary *energy* input (for example, steam, gas or water).

hedge contract

A contract between two or more parties affording one or each of them protection against certain financial risks.

high voltage (HV)

A *voltage* greater than 1 kV.

identified need

The reason why the *Transmission Network Service Provider* proposes that a particular investment be undertaken in respect of its *transmission network*.

Independent Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

independent person

A person who:

(a) is not a member, employee or member of staff of the *AER* or the *AEMC*;

(b) is not a director or employee of *AEMO*;

(c) is not a director or employee of, or partner in, a *Registered Participant*;

(d) does not have a direct or indirect financial interest (whether as shareholder, partner or other equity participant) in any *Registered Participant* or a *related body corporate* of any *Registered Participant*, other than an interest of less than 0.1% of the net shareholders funds of that entity (as determined at the date the relevant person is appointed to carry out a function under the *Rules*); or

(e) is not a director or employee of a *related body corporate* of any *Registered Participant*.

independently controllable two-terminal link

A *two-terminal link* through which the *power transfer* can be independently controlled within a range determined by the *power transfer capability* of the *two-terminal link* and the conditions prevailing in the rest of the *power system.*

indexed amount

As at any time and in relation to a dollar value that is expressly set out in Part C of Chapter 6 or Part C of Chapter 6A, that dollar value multiplied by CPI_a/CPI_b

where:

CPI_a is the *CPI* as at that time; and

CPI_b is the Consumer Price Index: All Groups Index Number, weighted average of eight capital cities published by the Australian Bureau of Statistics for the quarter ending 30 June 2006.

inflexible, inflexibility

In respect of a *scheduled generating unit, scheduled load* or *scheduled network service* for a *trading interval* means that the *scheduled generating unit, scheduled load* or *scheduled network service* is only able to be *dispatched* in the *trading interval* at a fixed *loading level* specified in accordance with clause 3.8.19(a).

Information Exchange Committee

The committee established under clause 7.2A.2(a).

Information Exchange Committee Annual Report

The annual report prepared by the *Information Exchange Committee* in accordance with the *Information Exchange Committee Operating Manual*.

Information Exchange Committee Election Procedures

The procedures of that title which set out the process for election of *Members.*

Information Exchange Committee Operating Manual

The manual of that title prepared by the *Information Exchange Committee* which sets out the processes pursuant to which the *Information Exchange Committee* operates.

Information Exchange Committee Recommendation

A recommendation made by the *Information Exchange Committee* to *AEMO* to make *B2B Procedures* or to *change* the *B2B Procedures*.

Information Exchange Committee Working Groups

The groups established by the *Information Exchange Committee* to assist with the *Information Exchange Committee Works Programme*.

Information Exchange Committee Works Programme

The work programme prepared by the *Information Exchange Committee* in respect of the development, implementation and operation of the *B2B Procedures* and other matters which are incidental to effective and efficient *B2B Communications*.

information guidelines

Guidelines made by the *AER* for the purpose of guiding a *Transmission Network Service Provider* in the submission of certified annual statements and other related information in accordance with clause 6A.17.2.

instrument transformer

Either a *current transformer* (*CT*) or a *voltage transformer* (*VT*).

insurance event

An event for which the risk of its occurrence is the subject of insurance taken out by or for a *Transmission Network Service Provider*, for which an allowance is provided in the *total revenue cap* for the *Transmission Network Service Provider* and in respect of which:

(a) the cost of the premium paid or required to be paid by the *Transmission Network Service Provider* in the *regulatory year* in which the cost of the premium changes is higher or lower than the premium that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;

(b) the risk eventuates and, as a consequence, the *Transmission Network Service Provider* incurs or will incur all or part of a deductible where the amount so incurred or to be so incurred in a *regulatory year* is higher or lower than the allowance for the deductible (if any) that is provided for in the *maximum allowed revenue* for the provider for that *regulatory year* by an amount of more than 1% of the *maximum allowed revenue* for the provider for that *regulatory year*;

(c) insurance becomes unavailable to the *Transmission Network Service Provider*; or

(d) insurance becomes available to the *Transmission Network Service Provider* on terms materially different to those existing as at the time the *revenue determination* was made (other than as a result of any act or omission of the provider which is inconsistent with good electricity industry practice).

intending load

A proposed purchase of electricity at a *connection point* (the location of which may be undefined) which is classified as an *intending load* in accordance with Chapter 2.

Intending Participant

A person who is registered by *AEMO* as an *Intending Participant* under Chapter 2.

interconnection, interconnector, interconnect, interconnected

A *transmission line* or group of *transmission lines* that *connects* the *transmission networks* in adjacent *regions*.

interconnector flow

The quantity of electricity in MW being transmitted by an *interconnector*.

interested party

(a) In Chapter 5, a person including an end user or its *representative* who, in *AEMO*'s opinion, has or identifies itself to *AEMO* as having an interest in relation to the *network* planning and development activities covered under rule 5.6 or in the determination of *plant standards* covered under clause 5.3.3(b2).

(b) Despite the definition in (a) above, in clauses 5.6.6 and 5.6.6A a person including an end user or its *representative* who, in the *AER's* opinion, has or identifies itself to the *AER* as having the potential to suffer a material and adverse market impact from the proposed *transmission investment* that is the *preferred option* identified in the *project assessment conclusions report*.

(c) In Chapter 6 or Chapter 6A, a person (not being a *Registered Participant* or *AEMO*) that has, in the *AER's* opinion, or identifies itself to the *AER* as having, an interest in the *Transmission Ring-Fencing Guidelines* or the *Distribution Ring-Fencing Guidelines*.

(d) In Chapter 2, a person including an end user or its *representative* who, in *AEMO's* opinion, has or identifies itself to *AEMO* as having an interest in relation to the structure of *Participant Fees.*

interim statement

Has the meaning given in clause 3.3.11(a)(1).

intermediary

A person who is registered by *AEMO* as a *Generator* or a *Network Service Provider* instead of another person who, in the absence of an exemption under clause 2.9.3, would be required to be registered as such under the *Rules*.

intermittent

A description of a *generating unit* whose output is not readily predictable, including, without limitation, solar generators, wave turbine generators, wind turbine generators and hydro-generators without any material storage capability.

inter-network test

A test conducted for the purpose of verifying the magnitude of the *power transfer capability* of more than one *transmission network* in accordance with clause 5.7.7.

inter-network testing constraint

A *constraint* on a *transmission network* as contemplated by clause 5.7.7.

inter-regional

Between *regions*.

inter-regional loss factor

A *marginal loss factor* determined according to clause 3.6.1.

inter-regional losses

Has the meaning given to it by clause 3.6.1(a).

inter-regional network constraint

A *constraint* on the *transmission* and/or *distribution networks* between *regions* as specified in clause 3.6.4(a).

interruptible load

A *load* which is able to be *disconnected*, either manually or automatically initiated, which is provided for the restoration or control of the *power system frequency* by *AEMO* to cater for *contingency events* or shortages of *supply*.

interval energy data

The data that results from the measurement of the flow of electricity in a power conductor where the data is prepared by a *data logger* into intervals which correspond to a *trading interval* or are sub-multiples of a *trading interval.*

intervention price dispatch interval

A *dispatch interval* declared by *AEMO* to be an *intervention price dispatch interval* in accordance with clause 3.9.3.

intervention price trading interval

A *trading interval* in which *AEMO* has declared an *intervention price dispatch interval* in accordance with clause 3.9.3.

intervention settlement timetable

Has the meaning given in clause 3.12.1(b).

intra-regional

Within a *region*.

intra-regional loss factor

A *marginal loss factor* determined according to clause 3.6.2.

intra-regional losses

Has the meaning given to it by clause 3.6.2(a).

intra-regional network constraint

A *constraint* on part of the *transmission* and *distribution networks* within a *region* as specified in clause 3.6.4(b).

invoiced amount

The aggregate of the *settlement statements*, *interim, preliminary* or *final*, which at the time of issue of a *call notice* are unpaid by the *Market Participant*, notwithstanding that the usual time for issue or payment of those *settlement statements* has not been reached.

involuntary load shedding

Load shedding where the *load* shed is not an *interruptible load* except *load* under the control of underfrequency relays as described in clause S5.1.10.1(a), or a *scheduled load*.

isolation

Electrical isolation of one part of a communication system from another but where the passage of *electronic data transfer* is not prevented.

Jurisdictional System Security Coordinator

A person appointed by the *Minister* of a *participating jurisdiction* in accordance with section 110 of the *National Electricity Law*.

jurisdictional derogation

Has the meaning given in the *National Electricity Law*. The jurisdictional derogations are included in Chapter 9.

jurisdictional electricity legislation

Has the meaning given to that term in the *National Electricity Law*.

jurisdictional metrology material

Jurisdictional metrology matters that are to be included in the *metrology procedure* for one or more of the *participating jurisdictions* and which is submitted by the *Ministers of the MCE* to *AEMO* under clause 7.14.2.

Jurisdictional NMI Standing Data schedule

The schedules described in clause 3.13.12(a), as amended from time to time in accordance with clause 3.13.12(b).

Jurisdictional NMI Standing Data suppliers

Registered Participants which are required by the relevant *participating jurisdiction's* legislation or licensing requirements to supply *NMI Standing Data* in respect of *connection points* in that *participating jurisdiction* to *AEMO*.

jurisdictional planning body

The entity nominated by the relevant *Minister* of a *participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

jurisdictional planning representative

The *representative* from the *jurisdictional planning body* for a *participating jurisdiction* nominated by that *jurisdictional planning body* as the *jurisdictional planning representative* for that *participating jurisdiction*.

Jurisdictional Regulator

The person authorised by a *participating jurisdiction* to regulate *distribution service* prices in that jurisdiction.

lack of reserve (LOR)

Any of the conditions described in clause 4.8.4(b), (c) or (d).

last resort planning power

The *AEMC's* power to direct a *Registered Participant* under clause 5.6.4(c).

last resort planning power guidelines

The guidelines made by the *AEMC* relating to the exercise of the *last resort planning power* and referred to in clause 5.6.4(o)-(r).

load

A *connection point* or defined set of *connection points* at which electrical power is delivered to a person or to another *network* or the amount of electrical power delivered at a defined instant at a *connection point*, or aggregated over a defined set of *connection points.*

load centre

A geographically concentrated area containing *load* or *loads* with a significant combined consumption capability.

load class

A grouping of customers with like *load* characteristics.

load shedding

Reducing or disconnecting *load* from the *power system*.

load shedding procedures

The procedures developed by *AEMO* for each *participating jurisdiction* in accordance with clause 4.3.2(h) for the implementation of the *load shedding* priority and *sensitive load* priority advised by that *Jurisdictional System Security Coordinator* under clauses 4.3.2(f)(1) and (2).

loading level

The level of output, consumption or power flow (in MW) of a *generating unit, load* or *scheduled network service*.

loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *dispatch* of a *scheduled generating unit* at a level above its *self-dispatch level.*

local area/local

The geographical area allocated to a *Network Service Provider* by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction.*

local black system procedures

The procedures, described in clause 4.8.12, applicable to a *local area* as approved by *AEMO* from time to time.

local market ancillary service requirement

Has the meaning given to it by clause 3.8.1(e2).

Local Network Service Provider

Within a *local area*, a *Network Service Provider* to which that geographical area has been allocated by the authority responsible for administering the *jurisdictional electricity legislation* in the relevant *participating jurisdiction.*

Local Retailer

In relation to a *local area*, the *Customer* who is:

1. a business unit or *related body corporate* of the relevant *Local Network Service Provider*; or

2. responsible under the laws of the relevant *participating jurisdiction* for the *supply* of electricity to *franchise customers* in that *local area*; or

3. if neither 1 or 2 is applicable, such other *Customer* as *AEMO* may determine.

Local Retailer/Market Customer Member

A *Member* appointed to the *Information Exchange Committee* in that membership category as set out in the *Information Exchange Committee Election Procedures*.

local spot price

A price determined according to clause 3.9.1(c).

loss factor

A multiplier used to describe the *electrical energy loss* for electricity used or transmitted.

low reserve

The conditions described in clause 4.8.4(a).

major supply disruption

The unplanned absence of *voltage* on a part of the *transmission system* affecting one or more *power stations*.

mandatory restrictions

Restrictions imposed by a *participating jurisdiction* by a relevant law, other than the *Rules,* on the use of electricity in a *regio*n.

mandatory restriction period

The period of *mandatory restriction*s.

mandatory restriction schedule

A schedule prepared in accordance with clause 3.12A.2.

marginal electrical energy loss

The *electrical energy loss* associated with an infinitesimal increment in electricity produced, transported and/or used.

marginal loss factor

A multiplier used to describe the *marginal electrical energy loss* for electricity used or transmitted.

market

Any of the markets or exchanges described in the *Rules*, for so long as the market or exchange is conducted by *AEMO*.

market ancillary service

A service identified in clause 3.11.2(a).

market ancillary service offer

A notice submitted by an *Ancillary Service Provider* to *AEMO* in respect of a *market ancillary service* in accordance with clause 3.8.7A.

market ancillary service specification

Has the meaning given in clause 3.11.2(b).

market ancillary services commencement date

29 September 2001.

market auditor

A person appointed by *AEMO* to carry out a *review* under clause 3.13.10(a).

market commencement

The date declared as such by *AEMO,* on which trading in the *market* commences.

market connection point

A *connection point* where any *load* is classified in accordance with Chapter 2 as a *market load* or which *connects* any *market generating unit* to the *national grid*, or where the *network service connected* at that *connection point* is a *market network service*.

Market Customer

A *Customer* who has classified any of its *loads* as a *market load* and who is also registered by *AEMO* as a *Market Customer* under Chapter 2.

market customer's additional claim

Has the meaning given in clause 3.12.2(g)(4).

market floor price

A price floor on *regional reference prices* as described in clause 3.9.6.

market generating unit

A *generating unit* whose *sent out generation* is not purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection point* and which has been classified as such in accordance with Chapter 2.

Market Generator

A *Generator* who has classified at least one *generating unit* as a *market generating unit* in accordance with Chapter 2 and who is also registered by *AEMO* as a *Market Generator* under Chapter 2.

market information

Information, other than *confidential information*, concerning the operation of the *spot market* or relating to the operation of, inputs to, or outputs from the *central dispatch* process.

market information bulletin board

A facility established by *AEMO* on the *electronic communication system* for the posting of information which may then be available to *Registered Participants*.

market load

A *load* at a *connection point* the electricity relating to which is purchased other than from the *Local Retailer* and which is classified by the person *connected* at

that *connection point* or, with the consent of that person, by some other person, as a *market load* in accordance with Chapter 2. There can be more than one *market load* at any one *connection point.*

market management systems

AEMO's market information systems and associated communications networks used to support the electronic communication by *Registered Participants* and others connected to or making use of the systems and networks in the operation of the *market*.

Market Management Systems Access Procedures

The procedures to be followed by *Registered Participants* and *Metering Providers* in connecting to and making use of the *market management systems* from time to time *published* by *AEMO* under clause 3.19.

market network service

A *network service* which is classified as a *market network service* in accordance with clause 2.5.2.

Market Network Service Provider

A *Network Service Provider* who has classified any of its *network services* as a *market network service* in accordance with Chapter 2 and who is also registered by *AEMO* as a *Market Network Service Provider* under Chapter 2.

Market Participant

A person who is registered by *AEMO* as a *Market Generator, Market Customer* or *Market Network Service Provider* under Chapter 2.

Market Participant registered data

The data kept on the register in accordance with schedule 5.5.

market price cap

A price cap on *regional reference prices* as described in clause 3.9.4.

Market Settlement and Transfer Solution Procedures

The procedures from time to time *published* by *AEMO* under clause 7.2.8 which include those governing the recording of financial responsibility for *energy* flows at a *connection point*, the transfer of that responsibility between *Market Participants* and the recording of *energy* flows at a *connection point*.

market suspension

Suspension of the *market* by *AEMO* in accordance with clause 3.14.3.

material inter-network impact

A material impact on another *Transmission Network Service Provider's network*, which impact may include (without limitation):

(a) the imposition of *power transfer constraints* within another *Transmission Network Service Provider's network*; or

(b) an adverse impact on the quality of *supply* in another *Transmission Network Service Provider's network*.

materially

For the purposes of the application of clause 6A.7.3, an event (other than a *network support event*) results in a *Transmission Network Service Provider* incurring materially higher or materially lower costs if the change in costs (as opposed to the revenue impact) that the *Transmission Network Service Provider* has incurred and is likely to incur in any *regulatory year* of the *regulatory control period*, as a result of that event, exceeds 1% of the *maximum allowed revenue* for the *Transmission Network Service Provider* for that *regulatory year*. In other contexts, the word has its ordinary meaning.

maximum allowed revenue

For a *Transmission Network Service Provider*: the amount calculated as such for a *regulatory year* of a *regulatory control period* in accordance with rule 6A.3.

For *AEMO*: the amount calculated as such for a *regulatory year* of a *regulatory control period* in accordance with clause S6A.4.2(c)(4).

maximum credit limit

In relation to a *Market Participant* a credit limit determined by *AEMO* for that *Market Participant* in accordance with clause 3.3.8.

maximum demand

The highest amount of electrical power delivered, or forecast to be delivered, over a defined period (*day*, week, month, season or year) either at a *connection point*, or simultaneously at a defined set of *connection points*.

maximum power input (MPI)

The largest single *supply* input to a particular location or *region*, typically the output of the largest single *generating unit* or group of *generating units* or the highest *power transfer* of a single *transmission line* or *interconnection*.

maximum ramp rate

The *maximum ramp rate* that an item of equipment is capable of achieving in normal circumstances. This may be:

(a) as specified by the manufacturer; or

(b) as independently certified from time to time to reflect changes in the physical capabilities of the equipment.

maximum total payment

The amount determined in accordance with clause 3.15.22.

measurement element

An energy measuring component which converts the flow of electricity in a power conductor into an electronic signal and / or a mechanically recorded electrical measurement.

medium term capacity reserve

At any time, the amount of surplus generating capacity indicated by the relevant *Generators* as being available for a particular period, being more than 7 *days* in the future but not more than 12 weeks, and which is assessed as being in excess of the capacity requirement to meet the forecast *load* demand, taking into account the known or historical levels of demand management.

medium term capacity reserve standard

The level of *medium term capacity reserves* required for a particular period as set out in the *power system security and reliability standards*.

medium-term PASA

The PASA in respect of the period from the 8th *day* after the current *trading day* to 24 months after the current *trading day* in accordance with clause 3.7.2.

Member

A person appointed to the *Information Exchange Committee* pursuant to the *Information Exchange Committee Election Procedures*, and includes all membership categories, unless a contrary intention appears.

meter

A device complying with *Australian Standards* which measures and records the production or consumption of electrical *energy*.

metering

Recording the production or consumption of electrical *energy*.

metering data

The data obtained from a *metering installation*, the processed data or substituted data.

metering database

A database of *metering data* and *settlements ready data* maintained and administered by *AEMO* in accordance with clause 7.9.

metering installation

The assembly of components and/or processes that are controlled for the purpose of metrology and which lie between the *metering point(s)* or *unmetered connection point* and the point of connection to the *telecommunications network*, as shown in schedule 7.1.

[**Note:** The assembly of components may include the combination of several metering points to derive the metering data for a connection point. The metering installation must be classified as a revenue metering installation and/or a check metering installation.]

metering point

The point of physical connection of the device measuring the current in the power conductor.

Metering Provider

A person who meets the requirements listed in schedule 7.4 and has been accredited by and registered by *AEMO* as a Metering Provider.

metering register

A register of information associated with a *metering installation* as required by schedule 7.5.

metering system

The collection of all components and arrangements installed or existing between each *metering point* and the *metering database*, as shown in schedule 7.1 .

metrology procedure

The procedure developed and published by *AEMO* in accordance with rule 7.14.

minimum access standard

In relation to a technical requirement of access, a standard of performance, identified in a schedule of Chapter 5 as a minimum access standard for that technical requirement, such that a *plant* that does not meet that standard will be denied access because of that technical requirement.

minimum technical ancillary service standards

The minimum technical service standards prepared by *AEMO* in accordance with clause 3.11.4.

Minister

A Minister that is a "Minister" under the *National Electricity Law*.

Minister of (a, that, another, or other, etc) participating jurisdiction

Has the same meaning as Minister of a participating jurisdiction has in the *National Electricity Law*.

Ministers of the MCE

Ministers of the participating jurisdictions acting as the MCE where MCE has the same meaning as in the *National Electricity Law*.

monitoring equipment

The testing instruments and devices used to record the performance of *plant* for comparison with expected performance.

month

Unless otherwise specified, the period beginning at 4.30 am on the relevant commencement date and ending at 4.30 am on the date in the next calendar month corresponding to the commencement date of the period.

nameplate rating

The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer, or as subsequently modified.

NATA

National Association of Testing Authorities.

National Electricity Code

Has the same meaning as in the *National Electricity Law*.

National Electricity Law

The National Electricity Law set out in the schedule to the National Electricity (South Australia) Act 1996 (SA) and applied in each of the *participating jurisdictions.*

National Electricity Market

Has the same meaning as in the *National Electricity Law.*

national electricity objective

The objective stated in section 7 of the Law.

national grid

The sum of all *connected transmission systems* and *distribution systems* within the *participating jurisdictions*.

National Measurement Act

The National Measurement Act 1960 of the Commonwealth as amended from time to time.

national transmission flow path

That portion of a *transmission network* or *transmission networks* used to transport significant amounts of electricity between *generation centres* and *load centres.*

national transmission grid

Has the meaning given in the *National Electricity Law*.

NCAS

A *network control ancillary service*.

negative change event

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* lower costs in providing *prescribed transmission services* than it would have incurred but for that event.

For a *Distribution Network Service Provider*, a *pass through event* that materially reduces the costs of providing *direct control services*.

negative network support event

A *network support event* which entails a *Transmission Network Service Provider* making lower *network support payments* in the preceding *regulatory year* than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *regulatory year*.

negative pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6A.7.3(g).

In respect of a *negative change event* for a *Distribution Network Service Provider*, an amount that is not greater than a *required pass through amount* as determined by the *AER* under clause 6.6.1(g).

negotiable service

(a) In relation to *transmission services* means *negotiated transmission services*.

(b) In relation to *distribution services* means *negotiated distribution services.*

negotiated access standard

In relation to a technical requirement of access for a particular *plant*, an agreed standard of performance determined in accordance with clause 5.3.4A and identified as a negotiated access standard for that technical requirement in a *connection agreement.*

negotiated distribution service

A *distribution service* that is a *negotiated network service* within the meaning of section 2C of the Law;

Negotiated Distribution Service Criteria

The criteria specified in a distribution determination in accordance with clause 6.7.4.

Negotiated Distribution Service Principles

The principles set out in clause 6.7.1.

negotiated transmission service

Any of the following services:

(a) a *shared transmission service* that:

(1) exceeds the *network* performance requirements (whether as to quality or quantity) (if any) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*; or

(2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, exceeds or does not meet the *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1;

(b) *connection services* that are provided to serve a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission network connection point*, other than *connection services* that are provided by one *Network Service Provider* to another *Network Service Provider* to *connect* their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*; or

(c) *use of system services* provided to a *Transmission Network User* and referred to in rule 5.4A(f)(3) in relation to *augmentations* or *extensions* required to be undertaken on a *transmission network* as described in rule 5.4A,

but does not include an *above-standard system shared transmission service* or a *market network service*.

Negotiated Transmission Service Criteria

For a *Transmission Network Service Provider* under a *transmission determination*, the criteria set out in that *transmission determination* pursuant to clause 6A.9.4.

Negotiated Transmission Service Principles

The principles set out in clause 6A.9.1.

negotiated use of system service

A *use of system service* in respect of which:

(a) a *Connection Applicant* may negotiate with a *Transmission Network Service Provider*;

(b) an *Embedded Generator* may negotiate with a *Distribution Network Service Provider*; or

(c) a *Market Network Service Provider* may negotiate with a *Distribution Network Service Provider*,

in accordance with clauses 5.4A(f)(3) or 5.5(f)(3).

negotiated use of system charges

The charges described in clauses 5.4A(f)(3) or 5.5(f)(3).

negotiating framework

For a *Transmission Network Service Provider*, the negotiating framework approved or included by the *AER* for that *Transmission Network Service Provider* in a final decision under clause 6A.14.1(6).

For a *Distribution Network Service Provider*, a negotiating framework as approved or substituted by the *AER* in its final decision under clause 6.12.1(15).

NEM

The *National Electricity Market*.

network

The apparatus, equipment, plant and buildings used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any *connection assets*. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by that *Network Service Provider*.

network capability

The capability of the *network* or part of the *network* to transfer electricity from one location to another.

network connection

The formation of a physical link between the *facilities* of two *Registered Participants* or a *Registered Participant* and a customer being a *connection* to a *transmission* or *distribution network* via *connection assets.*

network constraint

A *constraint* on a *transmission network* or *distribution network.*

network control ancillary service

A service identified in clause 3.11.4(a) which provides *AEMO* with a capability to control the real or *reactive power flow* into or out of a *transmission network* in order to:

(a) maintain the *transmission network* within its current, *voltage*, or stability limits following a *credible contingency event*; or

(b) enhance the value of *spot market* trading in conjunction with the *central dispatch* process.

network coupling point

The point at which *connection assets* join a *distribution network*, used to identify the *distribution service* price payable by a *Customer*.

network dispatch offer

An notice submitted by a *Scheduled Network Service Provider* to *AEMO* relating to the *dispatch* of a *scheduled network service* in accordance with clause 3.8.6A.

network element

A single identifiable major component of a *transmission system* or *distribution system* involving:

(a) an individual *transmission* or *distribution* circuit or a phase of that circuit; or

(b) a major item of apparatus or equipment associated with the function or operation of a *transmission line*, *distribution line* or an associated *substation* or *switchyard* which may include *transformers,* circuit breakers, *reactive plant* and *monitoring equipment* and control equipment.

network loop

A set of *network elements* that are *connected* together in the form of a closed path, that is in such a way that by progressing from each element to the next it is possible to return to the starting point.

network losses

Energy losses incurred in the transfer of electricity over a *transmission network* or *distribution network*.

network service

Transmission service or *distribution service* associated with the conveyance, and controlling the conveyance, of electricity through the *network*.

Network Service Provider

A person who engages in the activity of owning, controlling or operating a *transmission or distribution system* and who is registered by *AEMO* as a *Network Service Provider* under Chapter 2.

network service provider performance report

A report prepared by the *AER* under section 28V of the Law.

network support event

(a) If, at the end of a *regulatory year* of a *regulatory control period*, the amount of *network support payments* made by a *Transmission Network Service Provider* for that previous *regulatory year* is higher or lower than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the *Transmission Network Service Provider* for that *regulatory year*, this constitutes a *network support event*.

(b) In calculating the amount for the purposes of a *network support event* referred to in paragraph (a), the amount of *network support payments* made by a *Transmission Network Service Provider* must not include an amount of *network support payments* that are a substitute for a *network augmentation* where an allowance for capital expenditure in relation to that *network augmentation* has been provided for in the *revenue determination*.

network support pass through amount

The amount that should be passed through to *Transmission Network Users* in the *regulatory year* following the preceding *regulatory year*, in respect of a *network support event* for a *Transmission Network Service Provider*.

network support payment

A payment by a *Transmission Network Service Provider* to:

(a) any *Generator* providing *network* support services in accordance with clause 5.6.2; or

(b) any other person providing a *network* support service that is an alternative to *network augmentation*.

Network User

A *Generator*, a *Transmission Customer,* a *Distribution Customer* or a *Market Network Service Provider*.

new distribution network investment

Investment in a *new large distribution network asset* or a *new small distribution network asset*.

new large distribution network asset

An asset of a *Distribution Network Service Provider* which is an *augmentation* and in relation to which the *Distribution Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of $10 million, unless the *AER* publishes a requirement that a *new large distribution network asset* is to be distinguished from a *new small distribution network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such a specification has been made, an asset must require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new large distribution network asset*.

new network investment

Means:

(a) *new distribution network investment*; or

(b) investment in a *transmission network* asset of a *Transmission Network Service Provider* which is:

(1) an *augmentation*; and

(2) designed to address limitations in respect of a *distribution network* notified under clause 5.6.2(e)(2); and

(3) estimated by the *Transmission Network Service Provider* to have an estimated capital cost in excess of $5 million (as varied in accordance with a *cost threshold determination*).

new small distribution network asset

An asset of a *Distribution Network Service Provider* which is an *augmentation* and:

(a) in relation to which the *Distribution Network Service Provider* has estimated it will be required to invest a total capitalised expenditure in excess of $1 million, unless the *AER* publishes a requirement that an asset will be a *new small distribution network asset* if it involves investment of a total capitalised expenditure in excess of another amount, or satisfaction of another criterion. Where such specification has been made, an asset must

require total capitalised expenditure in excess of that amount or satisfaction of those other criteria to be a *new small distribution network asset*; and

(b) is not a *new large distribution network asset*.

NMAS

A *non-market ancillary service*.

NMI

A National Metering Identifier as described in clause 7.3.1(d).

NMI Standing Data

The following data in respect of a *connection point*:

(a) the *NMI* of the *connection point* and the street address of the relevant *connection point* to which that *NMI* is referable;

(b) the *NMI* checksum for the *connection point*;

(c) the identity of the *Local Network Service Provider*;

(d) the code (known as a TNI) identifying the relevant *transmission node* which identifies the *transmission loss factor* and/or *transmission use of system* charge for the *connection point*;

(e) the relevant *distribution loss factor* applicable to the *connection point*;

(f) the Network Tariff (identified by a code) applicable in respect of the *connection point*;

(g) the *NMI* classification code (as set out in the *Market Settlement and Transfer Solution Procedures*) of the *connection point*;

(h) the read cycle date, or date of next scheduled read or date in a relevant code representing the read cycle date or date of next scheduled read, for that *connection point*;

(i) the profile type applicable to the *connection point*; and

(j) such other categories of data as may be referred to in the *Market Settlement and Transfer Solution Procedures* as forming *NMI Standing Data,*

and, for the avoidance of doubt, does not include any *metering data* or other details of an end-user's consumption at that *connection point*.

nomenclature standards

The standards approved by *AEMO* in conjunction with the *Network Service Providers* relating to numbering, terminology and abbreviations used for

information transfer between *Registered Participants* as provided for in clause 4.12.

nominal voltage

The design *voltage* level, nominated for a particular location on the *power system*, such that power lines and circuits that are electrically connected other than through transformers have the same *nominal voltage* regardless of operating *voltage* and *normal voltage.*

non-credible contingency event

An event described in clause 4.2.3(e).

non-market ancillary service

Network control ancillary services and *system restart ancillary services*.

non-market generating unit

A *generating unit* whose *sent out generation* is purchased in its entirety by the *Local Retailer* or by a *Customer* located at the same *connection* point and which has been classified as such in accordance with Chapter 2.

Non-Market Generator

A *Generator* who has classified a *generating unit* as a *non-market generating unit* in accordance with Chapter 2.

Non-Registered Customer

A person who:

1. purchases electricity through a *connection point* with the *national grid* other than from the *spot market;* and

2. is eligible to be registered by *AEMO* as a *Customer* and to classify the *load* described in (1) as a *first-tier load* or a *second-tier load*, but is not so registered.

non-regulated transmission services

A *transmission service* that is neither a *prescribed transmission service* nor a *negotiated transmission service*.

non-scheduled generating unit

A *generating unit* so classified in accordance with Chapter 2.

non-scheduled generating system

A *generating system* comprising *non-scheduled generating units.*

Non-Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *non-scheduled generating unit* in accordance with Chapter 2.

non-scheduled load

A *market load* which is not a *scheduled load*.

non semi-dispatch interval

For a *semi-scheduled generating unit*, a *dispatch interval* other than a *semi-dispatch interval*.

normal operating frequency band

In relation to the *frequency* of the *power system*, means the range 49.9Hz to 50.1Hz or such other range so specified in the *power system security and reliability standards*.

normal operating frequency excursion band

In relation to the *frequency* of the *power system*, means the range specified as being acceptable for infrequent and momentary excursions of *frequency* outside the *normal operating frequency band*, being the range of 49.75 Hz to 50.25 Hz or such other range so specified in the *power system security and reliability standards*.

normal voltage

In respect of a *connection point,* its *nominal voltage* or such other *voltage* up to 10% higher or lower than *nominal voltage*, as approved by *AEMO,* for that *connection point* at the request of the *Network Service Provider* who provides *connection* to the *power system.*

normally off

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid,* and in accordance with clause 3.8.7(j), should be considered as being switched off.

normally on

Describes a *scheduled load* which, unless *dispatched* in accordance with its *dispatch bid,* and in accordance with clause 3.8.7(i), should be considered as being switched on.

NTNDP

The National Transmission Network Development Plan as defined in the *National Electricity Law.*

NTNDP database

The database that *AEMO* is required to establish and maintain under clause 5.6A.4.

NTNDP inputs

Has the meaning given in clause 5.6A.4.

NTP functions

Has the meaning given in the *National Electricity Law*.

off-loading price

The price specified for a *price band* and a *trading interval* in a *dispatch offer*, in accordance with clause 3.8.6, for the *off-loading* of a *scheduled generating unit* below its *self-dispatch level.*

off-loading price band

A *price band* submitted for *off-loading* below a *self-dispatch level* for a *trading interval* in a *dispatch offer.*

off-loading, off-load

The reduction in electricity output or consumption.

operating expenditure criteria

For a *Transmission Network Service Provider* – the matters listed in clause 6A.6.6(c)(1)–(3).

For a *Distribution Network Service Provider* – the matters listed in clause 6.5.6(c)(1)–(3).

operating expenditure factors

For a *Transmission Network Service Provider* – the factors listed in clause 6A.6.6(e)(1)–(10).

For a *Distribution Network Service Provider* – the factors listed in clause 6.5.6(e)(1)–(10).

operating expenditure objectives

For a *Transmission Network Service Provider* – the objectives set out in clause 6A.6.6(a).

For a *Distribution Network Service Provider* – the objectives set out in clause 6.5.6(a).

operational communication

A communication concerning the arrangements for, or actual operation of, the *power system* in accordance with the *Rules*.

operational frequency tolerance band

The range of *frequency* within which the *power system* is to be operated to cater for the occurrence of a *contingency event* as specified in the *power system security and reliability standards*.

outage

Any full or partial unavailability of equipment or *facility*.

outstandings

In relation to a *Market Participant*, the dollar amount determined by the formula in clause 3.3.9.

over-recovery amount

Any amount by which the revenue earned from the provision of *prescribed transmission services* in previous *financial years* exceeds the sum of the *AARR* in those *financial years*, grossed up by the application of an annual interest rate approved by the *AER* for this purpose.

Participant compensation fund

The fund of that name referred to in clause 3.16.

participant derogation

Has the meaning given in the *National Electricity Law*. The participant derogations are included in Chapter 8A.

Participant fees

The fees payable by *Registered Participants* described in clause 2.11.

participating jurisdiction

A jurisdiction that is a "participating jurisdiction" under the *National Electricity Law*.

PASA availability

The *physical plant capability* of a *scheduled generating unit*, *scheduled load* or *scheduled network* service, including any capability that can be made available within 24 hours.

pass through event

Any of the following is a pass through event:

(a) a regulatory change event;

(b) a service standard event;

(c) a tax change event;

(d) a terrorism event.

An *insurance event* is a pass through event for a *transmission determination* (in addition to those listed above).

An event nominated in a distribution determination as a pass through event is a pass through event for the determination (in addition to those listed above).

payment date

The 20th *business day* after the end of a *billing period.*

payment period

The typical period between trading and payment defined in schedule 3.3.

peak load

Maximum *load*.

performance incentive scheme parameters

For a *service target performance incentive scheme*, those parameters that are *published* by the *AER* in respect of that scheme pursuant to clause 6A.7.4(c).

performance standard

A standard of performance that:

(a) is established as a result of it being taken to be an applicable performance standard in accordance with clause 5.3.4A(i); or

(b) is included in the register of *performance standards* established and maintained by *AEMO* under rule 4.14(n),

as the case may be.

performance standards commencement date

For:

(a) *Generators*, *Customers* and *Network Service Providers* who plan, own, operate or control a *facility* located in a *participating jurisdiction* (other than Tasmania), the *performance standards commencement date* is, in relation to that *facility*, 16 November 2003; and

(b) *Generators*, *Customers* and *Network Service Providers* who plan, own, operate or control a *facility* located in Tasmania, the *performance standards commencement date* is, in relation to that *facility*, the date that Tasmania becomes a *participating jurisdiction*.

physical plant capability

The maximum MW output or consumption which an item of electrical equipment is capable of achieving for a given period.

plant

In relation to a *connection point*, includes all equipment involved in generating, utilising or transmitting electrical *energy*.

In relation to *dispatch bids and offers,* controllable generating equipment and controllable *loads.*

In relation to the *statement of opportunities* prepared by *AEMO*, individually controllable generating facilities registered or capable of being registered with *AEMO*.

In relation to the *regulatory investment test for transmission,* any of the above definitions for *plant* relevant to the application of the *regulatory investment test for transmission* to a proposed *transmission investment.*

plant availability

The *active power capability* of a *generating unit* (in MW), based on the availability of its electrical power conversion process and assuming no fuel supply limitations on the *energy* available for input to that electrical power conversion process.

plant standard

An Australian or international standard or a part thereof that:

(a) the *Reliability Panel* determines to be an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*, or

(b) a schedule in Chapter 5 establishes as an acceptable alternative to a particular *minimum access standard* or *automatic access standard* for a particular class of *plant*.

positive change event

For a *Transmission Network Service Provider*, a *pass through event* which entails the *Transmission Network Service Provider* incurring *materially* higher costs in providing *prescribed transmission services* than it would have incurred but for that event, but does not include a *contingent project* or an associated *trigger event*.

For a *Distribution Network Service Provider*, a *pass through event* that materially increases the costs of providing *direct control services*.

positive network support event

A *network support event* which entails a *Transmission Network Service Provider* making higher *network support payments* in the preceding *regulatory year* than the amount of *network support payments* (if any) that is provided for in the *annual building block revenue requirement* for the provider for that *regulatory year*.

positive pass through amount

For a *Transmission Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6A.7.3(c).

For a *Distribution Network Service Provider*, an amount (not exceeding the *eligible pass through amount*) proposed by the provider under clause 6.6.1(c).

postage stamp basis

A system of charging *Network Users* for *transmission service* or *distribution service* in which the price per unit is the same regardless of how much *energy* is used by the *Network User* or the location in the *transmission network* or *distribution network* of the *Network User*.

post-tax revenue model

For a *Transmission Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6A.5.1.

For a *Distribution Network Service Provider*, the model prepared and *published* by the *AER* in accordance with clause 6.4.1.

potential transmission project

New network investment only in respect of a *transmission network* which the *AEMC* identifies as likely, if constructed, to relieve forecast *constraints* in respect of *national transmission flow paths* between *regional reference nodes*.

potential value

In relation to a *transaction* for a *Market Participant*, the dollar amount determined by the procedure in clause 3.3.14.

power factor

The ratio of the *active power* to the *apparent power* at a *metering point*.

power station

In relation to a *Generator*, a *facility* in which any of that *Generator's generating units* are located.

power system

The electricity power system of the *national grid* including associated *generation* and *transmission* and *distribution networks* for the *supply* of electricity, operated as an integrated arrangement.

power system damping

The rate at which disturbances to the *satisfactory operating state* reduce in magnitude.

power system demand

The total *load* (in MW) supplied by the *power system*.

power system operating procedures

The procedures to be followed by *Registered Participants* in carrying out operations and/or maintenance activities on or in relation to primary and *secondary equipment connected* to or forming part of the *power system* or *connection points,* as described in clause 4.10.1.

power system reserve constraint

A *constraint* in the *central dispatch* due to the need to provide or maintain a specified type and level of *scheduled reserve*.

power system security

The safe scheduling, operation and control of the *power system* on a continuous basis in accordance with the principles set out in clause 4.2.6.

power system security and reliability standards

The standards (other than the *system restart standard*) governing *power system security* and *reliability* of the *power system* to be approved by the *Reliability Panel* on the advice of *AEMO*, but which may include but are not limited to standards for the *frequency* of the *power system* in operation, *contingency capacity* reserves (including guidelines for assessing requirements), *short term capacity reserves* and *medium term capacity reserves*.

power transfer

The instantaneous rate at which *active energy* is transferred between *connection points*.

power transfer capability

The maximum permitted *power transfer* through a *transmission* or *distribution network* or part thereof.

pre-dispatch

Forecast of *dispatch* performed one *day* before the *trading day* on which *dispatch* is scheduled to occur.

pre-dispatch schedule

A schedule prepared in accordance with clause 3.8.20(a).

preferred option

Has the meaning given in clause 5.6.5B(b).

preliminary program

The program to be prepared by a *Network Service Provider* showing proposed milestones for *connection* and access activities as specified in clause 5.3.3(b)(6).

preliminary statement

Has the meaning given in clause 3.15.14(a).

prescribed common transmission services

Prescribed transmission services that provide equivalent benefits to all *Transmission Customers* who have a *connection point* with the relevant *transmission network* without any differentiation based on their location within the *transmission system.*

prescribed connection services

Services that are either *prescribed entry services* or *prescribed exit services*.

prescribed entry services

Entry services that are *prescribed transmission services* by virtue of the operation of clause 11.6.11.

prescribed exit services

Exit services that are *prescribed transmission services* by virtue of the operation of clause 11.6.11 and *exit services* provided to *Distribution Network Service Providers*.

prescribed shared transmission services

Shared transmission services that are *prescribed TUOS service* or *prescribed common transmission services.*

prescribed transmission service

Any of the following services:

(a) a *shared transmission service* that:

(1) does not exceed such *network* performance requirements (whether as to quality or quantity) as that *shared transmission service* is required to meet under any *jurisdictional electricity legislation*;

(2) except to the extent that the *network* performance requirements which that *shared transmission service* is required to meet are prescribed under any *jurisdictional electricity legislation*, does not exceed such *network* performance requirements (whether as to quality or quantity) as are set out in schedule 5.1a or 5.1; or

(3) is an *above-standard system shared transmission service;*

(b) services that are required to be provided by a *Transmission Network Service Provider* under the *Rules*, or in accordance with *jurisdictional electricity legislation*, to the extent such services relate to the provision of the services referred to in paragraph (a), including such of those services as are:

(1) required by *AEMO* to be provided under the *Rules*; and

(2) necessary to ensure the integrity of a *transmission network*, including through the maintenance of *power system security* and assisting in the planning of the *power system*; or

(c) *connection services* that are provided by a *Transmission Network Service Provider* to another *Network Service Provider* to *connect* their *networks* where neither of the *Network Service Providers* is a *Market Network Service Provider*;

but does not include a *negotiated transmission service* or a *market network service*.

prescribed TUOS services or prescribed transmission use of system services;

Prescribed transmission services that:

(a) provide different benefits to *Transmission Customers* who have a *connection point* with the relevant *transmission network* depending on their location within the *transmission system*; and

(b) are not *prescribed common transmission services*, *prescribed entry services* or *prescribed exit services*.

price band

A MW quantity specified in a *dispatch bid, dispatch offer* or *market ancillary service offer* as being available for *dispatch* at a specified price.

pricing methodology

For a *Transmission Network Service Provider*, means the pricing methodology approved by the *AER* for that *Transmission Network Service Provider* and included in a *transmission determination* as referred to in rule 6A.24.

pricing methodology guidelines

Guidelines made by the *AER* under rule 6A.25 that contain the matters set out in clause 6A.25.2.

Pricing Principles for Prescribed Transmission Services

The principles set out in rule 6A.23.

pricing proposal

A pricing proposal under Part I of Chapter 6.

pricing zone

A geographic area within which *Network Users* are charged a specific set of *distribution service* prices.

primary restart service

A *system restart ancillary service* that meets the technical and availability requirements of a *primary restart service* specified by *AEMO* under clause 3.11.4A(d).

profile

Energy data or costs for a period longer than a *trading interval* allocated into *trading intervals*.

project assessment conclusions report

The report prepared under clauses 5.6.6(s) or 5.6.6(t).

project assessment draft report

The report prepared under clause 5.6.6(j).

project specification consultation report

The report prepared under clause 5.6.6(c).

projected assessment of system adequacy process ("PASA")

The medium term and short term processes described in clause 3.7 to be administered by *AEMO*.

Proponent

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

proposed contingent capital expenditure

The total forecast capital expenditure for the relevant *proposed contingent project*, as included in the *Revenue Proposal* for that project.

proposed contingent project

A proposal by a *Transmission Network Service Provider* as part of a *Revenue Proposal* for a project to be determined by the *AER* as a *contingent project* for the purposes of a *revenue determination* in accordance with clause 6A.8.1(b).

prospective reallocation

A *reallocation transaction* that occurs in a *trading interval* that takes place at a time after the *reallocation request* is made.

protected information

Has the meaning given in the *National Electricity Law*.

protection system

A system, which includes equipment, used to protect a *Registered Participant's facilities* from damage due to an electrical or mechanical fault or due to certain conditions of the *power system*.

prudential margin

A dollar amount to be determined by *AEMO* in accordance with clause 3.3.8.

prudential requirements

The requirements which must be satisfied as a condition of eligibility to remain a *Market Participant* in accordance with clause 3.3.

publish/publication

A document is published by the *AER* if it is:

(a) published on the *AER*'s website; and

(b) made available for public inspection at the *AER*'s public offices; and

(c) in the case of a document inviting submissions from members of the public – published in a newspaper circulating generally throughout Australia.

A document is published by someone else if it is made available to *Registered Participants* electronically.

ramp rate

The rate of change of *active power* (expressed as MW/minute) required for *dispatch.*

rated active power

(1) In relation to a *generating unit*, the maximum amount of *active power* that the *generating unit* can continuously deliver at the *connection point* when operating at its *nameplate rating*.

(2) In relation to a *generating system*, the combined maximum amount of *active power* that its in-service *generating units* can deliver at the *connection point,* when its in-service *generating units* are operating at their *nameplate ratings.*

reaction period

The estimated period of time taken to remove defaulting *Market Participants* from the *market* as defined in schedule 3.3.

reactive energy

A measure, in varhour–(varh), of the alternating exchange of stored energy in inductors and capacitors, which is the time-integral of the product of *voltage* and the out-of-phase component of current flow across a *connection point*.

reactive plant

Plant which is normally specifically provided to be capable of providing or absorbing *reactive power* and includes the *plant* identified in clause 4.5.1(g).

reactive power

The rate at which *reactive energy* is transferred.

Reactive power is a necessary component of alternating current electricity which is separate from *active power* and is predominantly consumed in the creation of magnetic fields in motors and *transformers* and produced by *plant* such as:

(a) alternating current generators;

(b) capacitors, including the capacitive effect of parallel *transmission* wires; and

(c) *synchronous condensers*.

reactive power capability

The maximum rate at which *reactive energy* may be transferred from a *generating unit* to a *connection point* as specified or proposed to be specified in a *connection agreement* (as the case may be).

reactive power reserve

Unutilised sources of *reactive power* arranged to be available to cater for the possibility of the unavailability of another source of *reactive power* or increased requirements for *reactive power*.

reactive power support/reactive support

The provision of *reactive power*.

reactor

A device, similar to a *transformer*, specifically arranged to be *connected* into the *transmission system* during periods of low *load* demand or low *reactive power* demand to counteract the natural capacitive effects of long *transmission lines* in generating excess *reactive power* and so correct any *transmission voltage* effects during these periods.

reallocation

A process under which two *Market Participants* request *AEMO* to make matching debits and credits to the position of those *Market Participants* with *AEMO*.

reallocation amount

In respect of a *Market Participant*, the positive or negative dollar amount in respect of a *reallocation transaction* being an amount payable to or by the *Market Participant*.

reallocation procedures

The procedures *published* by *AEMO* under clause 3.15.11A.

reallocation request

A request to *AEMO* for a *reallocation*, pursuant to clause 3.15.11(c).

reallocation transaction

A *transaction* which occurs when the applicable *trading interval* specified in a *reallocation request* occurs and the *reallocation request* has been registered and not deregistered before the expiration of the *trading interval*.

Reallocator

A person registered as a Reallocator by *AEMO* in accordance with rule 2.5B.

reasonable worst case

A position that, while not being impossible, is to a probability level that the estimate would not be exceeded more than once in 48 months.

rebid

A variation to a bid or offer made in accordance with clause 3.8.22.

reconfiguration investment

Has the meaning given in clause 5.6.5C(a)(5).

reduced payment period request

A written request to *AEMO* for the purpose of schedule 3.3, paragraph VI(C).

Referred Affected Participant

An *Affected Participant* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

Referred Directed Participant

A *Directed Participant* who has a claim referred to an independent expert pursuant to clauses 3.15.7B(c) or 3.15.7B(d).

Referred Market Customer

A *Market Customer* who has a claim referred to an independent expert pursuant to clauses 3.12.2(l) or 3.12.2(m).

region, regional

An area determined by the *AEMC* in accordance with Chapter 2A, being an area served by a particular part of the *transmission network* containing one or more major *load centres* or *generation centres* or both.

regional benefit directions procedures

Has the meaning given in clause 3.15.8(b2).

regional reference node

A location on a *transmission* or *distribution network* to be determined for each *region* by the *AEMC* in accordance with Chapter 2A.

regional reference price

Spot price at the *regional reference node*.

regional specific power system operating procedures

The procedures described in clause 4.10.1(a)(3).

Regions Publication

The document *published* by *AEMO* under clause 2A.1.3 that provides a list of all *regions, regional reference nodes* and the *region* to which each *market connection point* is assigned.

registered bid and offer data

Data submitted by *Scheduled Generators*, *Semi-Scheduled Generators* and *Market Participants* to *AEMO* in relation to their *scheduled loads, scheduled generating units, semi-scheduled generating units* and *scheduled market network services* in accordance with schedule 3.1.

Registered Participant

A person who is registered by *AEMO* in any one or more of the categories listed in clauses 2.2 to 2.7 (in the case of a person who is registered by *AEMO* as a *Trader*, such a person is only a *Registered Participant* for the purposes referred to in clause 2.5A). However, as set out in clause 8.2.1(a1), for the purposes of some provisions of clause 8.2 only, *AEMO* and *Connection Applicants* who are not otherwise *Registered Participants* are also deemed to be *Registered Participants*.

Registered Participant Agent

An agent of a *Registered Participant* appointed under clause 4.11.5.

regulated interconnector

An *interconnector* which is referred to in clause 11.8.2 of the *Rules* and is subject to *transmission service* regulation and pricing arrangements in Chapter 6A.

regulating capability

The capability to perform *regulating duty*.

regulating capability constraints

Constraints on the formulation of a realisable *dispatch* or *predispatch schedule* due to the need to provide for *regulating capability*.

regulating duty

In relation to a *generating unit,* the duty to have its *generated* output adjusted frequently so that any *power system frequency* variations can be corrected.

regulating lower service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *AEMO* in order to lower the *frequency* of the *power system.*

regulating raise service

The service of controlling the level of *generation* or *load* associated with a particular *facility*, in accordance with the requirements of the *market ancillary service specification*, in accordance with electronic signals from *AEMO* in order to raise the *frequency* of the *power system.*

regulation services

The *regulating raise service* and *regulating lower service*.

regulatory change event

A change in a *regulatory obligation* or *requirement* that:

(a) falls within no other category of *pass through event*; and

(b) occurs during the course of a *regulatory control period*; and

(c) substantially affects the manner in which the *Transmission Network Service Provider* provides *prescribed transmission services* or the *Distribution Network Service Provider* provides *direct control services* (as the case requires); and

(d) *materially* increases or *materially* decreases the costs of providing those services.

regulatory control period

(a) In respect of a *Transmission Network Service Provider*, a period of not less than 5 *regulatory years* in which a *total revenue cap* applies to that provider by virtue of a *revenue determination*.

(b) In respect of a *Distribution Network Service Provider*, a period of not less than 5 *regulatory years* for which the provider is subject to a control mechanism imposed by a distribution determination.

regulatory investment test for transmission

The test developed and *published* by the *AER* in accordance with clause 5.6.5B, as in force from time to time, and includes amendments made in accordance with clause 5.6.5B.

regulatory investment test for transmission application guidelines

The guidelines developed and *published* by the *AER* in accordance with clause 5.6.5B as in force from time to time, and includes amendments made in accordance with clause 5.6.5B.

regulatory obligation or requirement

Has the meaning assigned in the Law.

regulatory proposal

A proposal (by a *Distribution Network Service Provider*) under rule 6.8.

regulatory test

The test developed and published by the *AER* in accordance with clause 5.6.5A, as in force from time to time, and includes amendments made in accordance with clause 5.6.5A.

regulatory year

Each consecutive period of 12 calendar months in a *regulatory control period*, the first such 12 month period commencing at the beginning of the *regulatory control period* and the final 12 month period ending at the end of the *regulatory control period.* For *AEMO*, each *financial year* is a *regulatory year.*

related body corporate

In relation to a body corporate, a body corporate that is related to the first-mentioned body by virtue of the Corporations Act 2001 (Cth).

releasable user guide

A document associated with a functional block diagram and model source code provided under clause S5.2.4(b) (combined, forming the "**model**"), that contains sufficient information to enable a *Registered Participant* to use encrypted model source code provided under clause 3.13.3(l) to carry out *power system* studies for planning and operational purposes. The information in a releasable user guide must include, but is not limited to:

(1) the **model** parameters and their values;

(2) information about how the **model** parameter values vary with the operating state or output level of the *plant* or with the operating state or output level of any associated *plant*;

(3) instructions relevant to the use and operation of the encrypted model source code provided under clause 3.13.3(l);

(4) settings of *protection systems* that are relevant to load flow or dynamic simulation studies;

(5) information provided in accordance with Schedule 5.5 only to the extent that the information is not a part of the **model** or the **model** parameters and that is reasonably necessary to allow modelling of the *generating unit, generating system* or related *plant* in *power system* load flow or dynamic simulation studies;

(6) *connection point* details including its parameters and values, location, *network augmentations* or modifications and other relevant *connection* information; and

(7) if the *generating unit* or *generating system*, as appropriate, is not yet *connected*, the expected *connection* and commissioning dates.

relevant AEMO intervention event

A *AEMO intervention event* that involves the exercise of the *reliability and emergency reserve trader* in accordance with rule 3.20 as referred to in paragraph (b) of the definition of *AEMO intervention event*.

relevant tax

Any tax payable by a *Transmission Network Service Provider* or a *Distribution Network Service Provider* other than:

(a) income tax and capital gains tax;

(b) stamp duty, financial institutions duty and bank accounts debits tax;

(c) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any tax; or

(d) any tax that replaces or is the equivalent of or similar to any of the taxes referred to in paragraphs (a) to (b) (including any State equivalent tax).

Relevant Transmission Network Service Provider, Relevant TNSP

In respect of clause 5.7.7 has the meaning given in clause 5.7.7(a).

reliability

The probability of a system, device, *plant* or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

reliability and emergency reserve trader (RERT)

The actions taken by *AEMO* as referred to in clause 3.20.2, in accordance with rule 3.20, to ensure reliability of *supply*.

reliability augmentation

A *transmission network augmentation* that is necessitated principally by inability to meet the minimum *network* performance requirements set out in schedule 5.1 or in relevant legislation, regulations or any statutory instrument of a *participating jurisdiction*.

reliability corrective action

Investment by a *Transmission Network Service Provider* in respect of its *transmission network* for the purpose of meeting the service standards linked to the technical requirements of schedule 5.1 or in *applicable regulatory instruments* and which may consist of *network* or non-*network* options.

Reliability Panel

The panel established by the *AEMC* under section 38 of the *National Electricity Law*.

reliability standard

A standard as set out in the *power system security and reliability standards*, determined by the *Reliability Panel* under clause 8.8.3(a)(1).

reliable

The expression of a recognised degree of confidence in the certainty of an event or action occurring when expected.

reliable operating state

In relation to the *power system*, has the meaning set out in clause 4.2.7.

remote acquisition

The acquisition of interval *metering data* from a *metering installation*, where the acquisition process transmits the *metering data* from the site of the *metering point* to the *metering database*, and does not, at any time, require the presence of a person at, or near, the interval *meter* for the purposes of data collection or data verification (whether this occurs manually as a walk-by reading or through the use of a vehicle as a close proximity drive-by reading), and remote acquisition includes but is not limited to methods that transmit *metering data* via:

(1) direct dial-up;

(2) satellite;

(3) the internet;

(4) a general packet radio service;

(5) power line carrier; or

(6) any other equivalent technology.

remote control equipment

Equipment used to control the operation of elements of a *power station* or *substation* from a *control centre*.

remote monitoring equipment

Equipment installed to enable monitoring of a *facility* from a *control centre.*

replacement transmission network asset

A proposed new asset of a *Transmission Network Service Provider* which the relevant *Transmission Network Service Provider* reasonably estimates to have an estimated capital cost in excess of $5 million (as varied in accordance with a *cost threshold determination*) and which will replace any existing element of its *transmission network*. For the avoidance of doubt, if the cost of replacing any existing element also results in an *augmentation* to the *network*, then such an asset must be included in this definition where the *Transmission Network Service Provider* has estimated that the asset will have an estimated capital cost in excess of $5 million.

representative

In relation to a person, any employee, agent or professional adviser of:

(a) that person; or

(b) a *related body corporate* of that person; or

(c) a third party contractor to that person.

required pass through amount

In respect of a *negative change event* for a *Transmission Network Service Provider*, the costs in the provision of *prescribed transmission services* that the *Transmission Network Service Provider* has saved and is likely to save until the end of the *regulatory control period* as a result of that *negative change event* (as opposed to the revenue impact of that event).

In respect of a negative change event for a *Distribution Network Service Provider*, the costs in the provision of *direct control services* that the *Distribution Network Service Provider* has saved and is likely to save up to the end of the *regulatory control period* as a result of the *negative change event* (as opposed to the revenue impact of that event).

RERT guidelines

The guidelines developed and *published* by the *Reliability Panel* under clause 3.20.8.

RERT principles

The principles referred to in clause 3.20.2(b).

reserve

Scheduled reserve or *unscheduled reserve*.

reserve contract

A *scheduled reserve contract* or an *unscheduled reserve contract*.

response breakpoint

(a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) above which the amount of response specified in the *offer* reduces with increased *generation* or *load* level; and

(b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the level of associated *generation* or *load* (in MW) below which the amount of response specified in the *offer* reduces with decreased *generation* or *load* level.

response capability

(a) In relation to a *market ancillary service offer* to raise the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* below the associated *response breakpoint*; and

(b) in relation to a *market ancillary service offer* to lower the *frequency* of the *power system*, the amount of the response in (MW) which is specified in the *offer* for every level of associated *generation* or *load* above the associated *response breakpoint.*

responsible person

The person who has responsibility for the provision of a *metering installation* for a particular *connection point*, being either the *Local Network Service Provider* or the *Market Participant* as described in Chapter 7.

restriction demand reduction

The reduction in a *Market Customer's* demand due to the imposition of *mandatory restrictions* as reasonably determined by an independent expert in accordance with clause 3.12A.7. For the avoidance of doubt, the reduction of a *Market Customer's* demand due to the imposition of *mandatory restrictions* should exclude any reduction in its demand which the *Market Customer* claims was due to the operation of *generation* and as reasonably verified by the independent expert in a similar manner to that used by the independent expert to determine restrictions due to demand management.

restriction offer

An offer by a *Scheduled Generator* or a *Scheduled Network Service Provider* to provide capacity to *AEMO* for all or part of a *mandatory restriction period* made in accordance with the *restriction offer procedures.*

restriction offer procedures

The procedures developed by *AEMO* in accordance with clause 3.12A.1.

restriction shortfall amount

The amount determined in accordance with clause 3.12A.7(b).

retailer of last resort

In relation to a jurisdiction, means a person or persons required under the retailer of last resort arrangements of that jurisdiction to assume the obligations under the *Rules* (including the obligation to pay *trading amounts* and other amounts due under the *Rules*) of a *Market Customer* that has defaulted in the performance of its obligations under the *Rules*.

revenue determination

A determination referred to in clause 6A.2.2(1) and rule 6A.4 as substituted (if at all) pursuant to clause 6A.7.1 or rule 6A.15 or as amended pursuant to clause 6A.8.2.

revenue meter

The *meter* that is used for obtaining the primary source of *metering data*.

revenue metering data

The *metering data* obtained from a *revenue metering installation*.

revenue metering installation

A *metering installation* used as the primary source of *metering data* for the *settlements* process.

revenue metering point

The *metering point* at which the *revenue metering installation* is *connected*.

Revenue Proposal

For a *Transmission Network Service Provider*, a proposal submitted or resubmitted by the *Transmission Network Service Provider* to the *AER* pursuant to clause 6A.10.1(a), clause 6A.11.2 or clause 6A.12.3(a) (as the context requires).

review

An examination of the specified matters conducted to the standard specified for a "review" in Auditing Standard AUS106: "Explanatory Framework for standards on Audit and Audit Related Services" prepared by the Auditing Standards Board, as varied from time to time.

revised statement

A statement issued by *AEMO* under clause 3.15.19 following the resolution of a dispute regarding a *final statement*.

RMS phase voltage

The *voltage* of *supply* measured as the average of the root mean square of the *voltages* between each pair of phases.

roll forward model

According to context:

(a) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *transmission systems* in accordance with clause 6A.6.1;

(b) the model developed and published by the *AER* for the roll forward of the regulatory asset base for *distribution systems* in accordance with clause 6.5.1.

routine revised statement

A *settlement statement* issued by *AEMO* under clause 3.15.19(b).

Rule fund

A fund referred to in clause 1.11(a).

Rules

The rules called the National Electricity Rules made under Part 7 of *the National Electricity Law* as amended from time to time in accordance with that Part.

Rules bodies

Any person or body, other than *AEMO*, the *AER*, the *AEMC*, or the *ACCC,* that is appointed or constituted by the *Rules* to perform functions under the *Rules*.

Rules consultation procedures

The procedures for consultation with *Registered Participants* or other persons as set out in clause 8.9.

satisfactory operating state

In relation to the *power system*, has the meaning given in clause 4.2.2.

scheduled generating unit

(a) A *generating unit* so classified in accordance with Chapter 2.

(b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

scheduled generating system

A *generating system* comprising *scheduled generating units.*

Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *scheduled generating unit* in accordance with Chapter 2.

scheduled high price

The dollar amount per MWh or MW, as the case may be, determined as such by *AEMO* pursuant to clause 3.3.17.

scheduled load

(a) A *market load* which has been classified by *AEMO* in accordance with Chapter 2 as a *scheduled load* at the *Market Customer's* request. Under Chapter 3, a *Market Customer* may submit *dispatch bids* in relation to *scheduled loads.*

(b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled loads* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

scheduled low price

The dollar amount per MWh or MW, as the case may be, determined as such by *AEMO* pursuant to clause 3.3.17.

scheduled network service

(a) A *network service* which is classified as a *scheduled network service* in accordance with Chapter 2.

(b) For the purposes of Chapter 3 and rule 4.9, two or more *scheduled network services* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

Scheduled Network Service Provider

A *Network Service Provider* who has classified any of its *network services* as a *scheduled network service.*

scheduled plant

In respect of a *Registered Participant,* a *scheduled generating unit*, a *semi-scheduled generating unit*, a *scheduled network service* or a *scheduled load* classified by or in respect to that *Registered Participant* in accordance with Chapter 2.

scheduled reserve

The amount of surplus or unused capacity:

(a) of *scheduled generating units*;

(b) of *scheduled network services*; or

(c) arising out of the ability to reduce *scheduled loads*.

scheduled reserve contract

A contract entered into by *AEMO* for the provision of *scheduled reserve* in accordance with rule 3.20.

scheduling error

Scheduling error means any of the events described in clause 3.8.24(a).

secondary equipment

Those assets of a *Market Participant*'s *facility* which do not carry the *energy* being traded, but which are required for control, protection or operation of assets which carry such *energy*.

secondary restart service

A *system restart ancillary service* that meets the technical and availability requirements of a *secondary restart service* specified by *AEMO* under clause 3.11.4A(d).

Second-Tier Customer

A *Customer* which has classified any *load* as a *second-tier load* in accordance with Chapter 2.

second-tier load

Electricity purchased at a *connection point* in its entirety other than directly from the *Local Retailer* or the *spot market* and which is classified as a *second-tier load* in accordance with Chapter 2.

secure operating state

In relation to the *power system* has the meaning given in clause 4.2.4.

self-commitment, self-commit

Commitment, where the decision to *commit* a *generating unit* was made by the relevant *Generator* without instruction or direction from *AEMO*.

self-decommitment

Decommitment, where the decision to *decommit* a *generating unit* was made by the relevant *Generator* without instruction or direction from *AEMO.*

semi-dispatch interval

For a *semi-scheduled generating unit*, a *dispatch interval* for which either:

(a) a *network constraint* would be violated if the *semi-scheduled generating unit's generation* were to exceed the *dispatch level* specified in the related *dispatch instruction* at the end of the *dispatch interval*; or

(b) the *dispatch level* specified in that *dispatch instruction* is less than the *unconstrained intermittent generation forecast* at the end of the *dispatch interval*,

and which is notified by *AEMO* in that *dispatch instruction* to be a *semi-dispatch interval.*

self-dispatch level

The level of *generation* in MW, as specified in a *dispatch offer* for a *generating unit* and a *trading interval,* which is the level at which that *generating unit* must be *dispatched* by *AEMO* in that *trading interval* unless otherwise *dispatched* in accordance with clause 3.8 or unless required to operate under a *direction* issued by *AEMO* in accordance with clause 4.8.9.

semi-scheduled generating system

A *generating system* comprising *semi-scheduled generating units*.

semi-scheduled generating unit

(a) A *generating unit* classified in accordance with clause 2.2.7.

(b) For the purposes of Chapter 3 and rule 4.9, two or more *generating units* referred to in paragraph (a) that have been aggregated in accordance with clause 3.8.3.

Semi-Scheduled Generator

A *Generator* in respect of which any *generating unit* is classified as a *semi-scheduled generating unit* in accordance with Chapter 2.

sensitive loads

Loads defined as sensitive for each *participating jurisdiction* by the *Jurisdictional System Security Coordinator* for that *participating jurisdiction*.

sent out generation

In relation to a *generating unit,* the amount of electricity *supplied* to the *transmission* or *distribution network* at its *connection point*.

Service Applicant

According to context:

(a) a person who is an existing or intending *Registered Participant* or a person who is eligible to become a *Registered Participant*; or

(b) a person who asks a *Distribution Network Service Provider* for access to a *distribution service*.

service standard event

A legislative or administrative act or decision that:

(a) has the effect of:

(i) substantially varying, during the course of a *regulatory control period*, the manner in which a *Transmission Network Service Provider* is required to provide a *prescribed transmission service*, or a *Distribution Network Service Provider* is required to provide a *direct control service*; or

(ii) imposing, removing or varying, during the course of a *regulatory control period*, minimum service standards applicable to *prescribed transmission services* or *direct control services*; or

(iii) altering, during the course of a *regulatory control period*, the nature or scope of the *prescribed transmission services* or *direct control services*, provided by the service provider; and

(b) *materially* increases or *materially* decreases the costs to the service provider of providing *prescribed transmission services* or *direct control services*.

service target performance incentive scheme

A For a *Transmission Network Service Provider* – a scheme developed and *published* by the *AER* in accordance with clause 6A.7.4.

For a *Distribution Network Service Provider* – a scheme developed and *published* by the *AER* in accordance with clause 6.6.2.

settlement amount

The amount calculated by *AEMO* pursuant to clause 3.15.12.

settlement statement

Includes an *interim statement, preliminary statement* and *final statement.*

settlements

The activity of producing bills and credit notes for *Market Participants*.

settlements ready data

The *metering data* that has undergone a validation and substitution process by *AEMO* for the purpose of *settlements* and is delivered to the *metering database.*

settlements residue

Any surplus or deficit of funds retained by *AEMO* upon completion of *settlements* to all *Market Participants* in respect of a *trading interval*.

settlement residue committee

The committee established by *AEMO* in accordance with clause 3.18.5.

settlement residue distribution agreement or SRD agreement

Has the meaning given in clause 3.18.1(b).

shared distribution service

A service provided to a *Distribution Network User* for use of a *distribution network* for the conveyance of electricity (including a service that ensures the integrity of the related *distribution system*).

shared network capability service

Has the meaning given in the *National Electricity Law*.

shared transmission service

A service provided to a *Transmission Network User* for use of a *transmission network* for the conveyance of electricity (including a service that ensures the integrity of the related *transmission system*).

short circuit fault

A fault having a metallic conducting path between any two or more conductors or between any conductor and ground, including touching conductors and faults through earthing facilities, and excluding faults within equipment at a station.

short term capacity reserve

At any time, the amount of surplus or unused generating capacity indicated by the relevant *Generators* as being available for any half hour period during the next 7 *days* and which is assessed as being in excess of the capacity requirement to meet

the current forecast *load* demand, taking into account the known or historical levels of demand management.

short term capacity reserve standard

The level of *short term capacity reserve* required for a particular period in accordance with the *power system security and reliability standards*.

short term PASA

The *PASA* in respect of the period from 2 *days* after the current *trading day* to the end of the 7th day after the current *trading day* inclusive in respect of each *trading interval* in that period.

short term PASA inputs

The inputs to be prepared by *AEMO* in accordance with clause 3.7.3(d).

shunt capacitor

A type of *plant connected* to a *network* to generate *reactive power*.

shunt reactor

A type of *plant connected* to a *network* to absorb *reactive power*.

single contingency

In respect of a *transmission* or *distribution network* and *Network Users*, a sequence of related events which result in the removal from service of one *Network User*, *transmission* or *distribution line*, or *transformer*. The sequence of events may include the application and clearance of a fault of defined severity.

slow lower service

The service of providing, in accordance with the requirements of the *market ancillary service specification,* the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a rise in that *frequency*.

slow raise service

The service of providing, in accordance with the requirements of the *market ancillary service specification,* the capability of controlling the level of *generation* or *load* associated with a particular *facility* in response to the locally sensed *frequency* of the *power system* in order to stabilise a fall in that *frequency*.

slow start generating unit

A *generating unit* described in clause 3.8.17(a).

slow start reserve generating unit

A *slow start generating unit* providing *scheduled reserve*.

Special Participant

A *System Operator* or a *Distribution System Operator*.

special revised statement

A *settlement statement* issued by *AEMO* under clause 3.15.19(a)(3).

spot market

The spot market established and operated by *AEMO* in accordance with clause 3.4.1.

spot market transaction

A transaction as defined pursuant to clause 3.15.6 which occurs in the *spot market*.

spot price

The price for electricity in a *trading interval* at a *regional reference node* or a *connection point* as determined in accordance with clause 3.9.2.

spot price forecast

A forecast of the *spot price*.

SRAS

A *system restart ancillary service*.

stand-alone amount

For a *category of prescribed transmission services*, the costs of a *transmission system* asset that would have been incurred had that *transmission system* asset been developed, exclusively to provide that *category of prescribed transmission services*.

standard control service

A *direct control service* that is subject to a control mechanism based on a *Distribution Network Service Provider's total revenue requirement*.

Standards Australia

The Standards Association of Australia and includes its heirs or successors in business.

statement of opportunities

A statement prepared by *AEMO* to provide information to assist *Scheduled Generators*, *Semi-Scheduled Generators*, *Transmission Network Service Providers* and *Market Participants* in making an assessment of the future need for

electricity generating or demand management capacity or augmentation of the *power system*.

statement of regulatory intent

A statement issued by the *AER* under clause 6.5.4(c).

static excitation system

An *excitation control system* in which the power to the rotor of a *synchronous generating unit* is transmitted through high power solid-state electronic devices.

static VAR compensator

A device specifically provided on a *network* to provide the ability to generate and absorb *reactive power* and to respond automatically and rapidly to *voltage* fluctuations or *voltage* instability arising from a disturbance or disruption on the *network.*

submission guidelines

The guidelines made by the *AER* in accordance with rule 6A.10 for the purposes of guiding a *Transmission Network Service Provider* in the submission of a *Revenue Proposal* under Part E of Chapter 6A.

substation

A *facility* at which two or more lines are switched for operational purposes. May include one or more *transformers* so that some *connected* lines operate at different nominal *voltages* to others.

supply

The delivery of electricity.

survey period

An agreed sample period used to determine the allocation of costs and prices for use of *transmission network* or *distribution network* assets.

suspended region

A region in which the *spot market* is suspended in accordance with clause 3.14.5(a).

suspension notice

A notice issued by *AEMO* to a *defaulting Market Participant* pursuant to clause 3.15.21(c).

switchyard

The *connection point* of *a generating unit* into the *network*, generally involving the ability to *connect* the *generating unit* to one or more outgoing *network* circuits.

Sydney time

Eastern Standard Time or Eastern Daylight Saving Time as applicable in Sydney.

synchronise

The act of *synchronising* a *generating unit* or a *scheduled network service* to the *power system*.

synchronising, synchronisation

To electrically *connect* a *generating unit* or a *scheduled network service* to the *power system*.

synchronous condensors

Plant, similar in construction to a *generating unit* of the *synchronous generator* category, which operates at the equivalent speed of the *frequency* of the *power system,* specifically provided to generate or absorb *reactive power* through the adjustment of rotor current.

synchronous generating unit

The alternating current generators of most thermal and hydro (water) driven power turbines which operate at the equivalent speed of the *frequency* of the *power system* in its *satisfactory operating state*.

synchronous generator voltage control

The automatic *voltage control system* of a *generating unit* of the *synchronous generator* category which changes the output *voltage* of the *generating unit* through the adjustment of the generator rotor current and effectively changes the *reactive power* output from that *generating unit.*

System Operator

A person whom *AEMO* has engaged as its agent, or appointed as its delegate, under clause 4.3.3 to carry out some or all of *AEMO's* rights, functions and obligations under Chapter 4 of the *Rules* and who is registered by *AEMO* as a *System Operator* under Chapter 2.

system restart ancillary service

A service provided by *facilities* with *black start capability* which allows:

(a) *energy* to be supplied; and

(b) a *connection* to be established,

sufficient to restart large *generating units* following a *major supply disruption*.

system restart plan

The plan described in clause 4.8.12(a).

system restart standard

The standard as determined by the *Reliability Panel* in accordance with clause 8.8.3(a)(1a), for the acquisition of *system restart ancillary services*.

system standard

A standard for the performance of the *power system* as set out in schedule 5.1a.

system-wide benefits

Benefits that extend beyond a *Transmission Network User*, or group of *Transmission Network Users*, at a single *transmission connection point* to other *Transmission Network Users*.

take or pay contract

A contract between a buyer and a seller of an asset-based service under which the buyer undertakes to pay regularly to the seller a fixed or minimum sum regardless of the actual level of consumption of the service by the buyer. The contract has the effect of transferring market risk associated with the assets from the seller (as the owner of the assets) to the buyer.

tap-changing transformer

A *transformer* with the capability to allow internal adjustment of output *voltages* which can be automatically or manually initiated and which is used as a major component in the control of the *voltage* of *transmission* and *distribution networks* in conjunction with the operation of *reactive plant*. The *connection point* of a *generating unit* may have an associated tap-changing transformer, usually provided by the *Generator*.

tariff class

A class of customers for one or more *direct control services* who are subject to a particular tariff or particular tariffs.

tax

Any tax, levy, impost, deduction, charge, rate, rebate, duty, fee or withholding which is levied or imposed by an *Authority*.

tax change event

A tax change event occurs if:

(a) any of the following occurs during the course of a *regulatory control period* for a *Transmission Network Service Provider* or a *Distribution Network Service Provider*:

(i) a change in a *relevant tax*, in the application or official interpretation of a *relevant tax*, in the rate of a *relevant tax*, or in the way a *relevant tax* is calculated;

(ii) the removal of a *relevant tax*;

(iii) the imposition of a *relevant tax*; and

(b) in consequence, the costs to the service provider of providing *prescribed transmission services* or *direct control services* are materially increased or decreased.

technical envelope

The limits described in clause 4.2.5.

telecommunications network

A telecommunications network that provides access for public use or an alternate telecommunications network that has been approved by *AEMO* for the delivery of *metering data.*

template for generator compliance programs

The template determined and *published* by the *Reliability Panel* under clause 8.8.3 of the *Rules*.

terms and conditions of access

According to context:

(a) the terms and conditions described in clause 6A.1.2 (access to transmission services);

(b) the terms and conditions described in clause 6.1.3 (access to *distribution services*).

terrorism event

An act (including, but not limited to, the use of force or violence or the threat of force or violence) of any person or group of persons (whether acting alone or on behalf of in connection with any organisation or government), which from its nature or context is done for, or in connection with, political, religious, ideological, ethnic or similar purposes or reasons (including the intention to influence or intimidate any government and/or put the public, or any section of the public, in fear) and which *materially* increases the costs to a *Transmission Network Service Provider* of providing *prescribed transmission services* or the costs to a *Distribution Network Service Provider* of providing *direct control services*.

test program

In respect of an *inter-network test*, means the program and co-ordination arrangements for the test including, without limitation:

(1) test procedures;

(2) the proposed timing of the test;

(3) operational procedures to manage *power system security* during the test;

(4) required *power system* conditions for conducting the test;

(5) test facilitation services including, as necessary, *ancillary services* required to achieve those *power system* conditions;

(6) criteria for continuing or concluding a test and the decision-making process relevant to the test; and

(7) contingency arrangements.

tie

Identically priced *dispatch bids* or *dispatch offers*.

time

Eastern Standard Time.

time stamp

The means of identifying the *time* and date at which data is transmitted or received.

timetable

The timetable published by *AEMO* under clause 3.4.3 for the operation of the *spot market* and the provision of *market* information.

total revenue cap

For a *Transmission Network Service Provider* for a *regulatory control period*, the sum of the *maximum allowed revenues* for that provider for each *regulatory year* of that *regulatory control period* as calculated in accordance with clause 6A.5.3 and set out in a *revenue determination*.

total revenue requirement

For a *Distribution Network Service Provider*, an amount representing revenue calculated for the whole of a *regulatory control period* in accordance with Part C of Chapter 6.

Trader

A person who is registered by *AEMO* as a *Trader* under Chapter 2.

trading amount

The positive or negative dollar amount resulting from a *transaction*, determined pursuant to clauses 3.15.6, 3.15.6A or 3.15.11.

trading day

The 24 hour period commencing at 4.00 am and finishing at 4.00 am on the following *day*.

trading interval

A 30 minute period ending on the hour (EST) or on the half hour and, where identified by a time, means the 30 minute period ending at that time.

trading limit

A dollar amount for a *Market Participant*, determined pursuant to clause 3.3.10.

trading margin

Has the meaning given in clause 3.3.15.

transaction

A *spot market transaction*, *reallocation transaction* or any other transaction either in the *market* or to which *AEMO* is a party.

transformer

A *plant* or device that reduces or increases the *voltage* of alternating current.

transformer tap position

Where a tap changer is fitted to a *transformer*, each tap position represents a change in *voltage* ratio of the *transformer* which can be manually or automatically adjusted to change the *transformer* output *voltage*. The tap position is used as a reference for the output *voltage* of the *transformer*.

transmission

Activities pertaining to a *transmission system* including the conveyance of electricity through that *transmission system*.

transmission consultation procedures

The procedures set out in Part H of Chapter 6A that must be followed by:

(a) the *AER* in making, developing or amending guidelines, models or schemes or in reviewing methodologies; or

(b) the *AEMC* in developing or amending guidelines.

Transmission Customer

A *Customer, Non-Registered Customer* or *Distribution Network Service Provider* having a *connection point* with a *transmission network*.

transmission determination

Has the meaning given in the *National Electricity Law*, and includes a determination by the *AER* as described in rule 6A.2.

transmission element

A single identifiable major component of a *transmission system* involving:

(a) an individual *transmission* circuit or a phase of that circuit;

(b) a major item of *transmission plant* necessary for the functioning of a particular *transmission* circuit or *connection point* (such as a *transformer* or a circuit breaker).

transmission investment

Expenditure on assets and services which is undertaken by a *Transmission Network Service Provider* or any other person to address an *identified need* in respect of its *transmission network*.

transmission line

A power line that is part of a *transmission network*.

transmission network

A *network* within any *participating jurisdiction* operating at nominal *voltages* of 220 kV and above plus:

(a) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*;

(b) any part of a *network* operating at nominal *voltages* between 66 kV and 220 kV that is not referred to in paragraph (a) but is deemed by the *AER* to be part of the *transmission network*.

transmission network connection point

A *connection point* on a *transmission network*.

Transmission Network Service Provider

A person who engages in the activity of owning, controlling or operating a *transmission system.*

Transmission Network User

In relation to a *transmission network*, a *Transmission Customer*, a *Generator* whose *generating unit* is directly *connected* to the *transmission network* or a *Network Service Provider* whose *network* is *connected* to the *transmission network.*

transmission network user access

The *power transfer capability* of the *transmission network* in respect of:

(a) *generating units* or group of *generating units*;

(b) *network elements*; or

(c) plant,

at a *connection point* which has been negotiated in accordance with rule 5.4A.

transmission or distribution system

A *transmission system* or *distribution system* that:

1. is used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail); and

2. is *connected* to another such system.

transmission plant

Apparatus or equipment associated with the function or operation of a *transmission line* or an associated *substation* or *switchyard*, which may include *transformers*, circuit breakers, *reactive plant* and *monitoring equipment* and control equipment.

Transmission Ring-Fencing Guidelines

The Guidelines made under rule 6A.21.

transmission service

The services provided by means of, or in connection with, a *transmission system*.

transmission services access dispute

A dispute between a *Transmission Network Service Provider* and a *Service Applicant* as to *terms and conditions of access* for the provision of *prescribed transmission services* or for the provision of *negotiated transmission services* as referred to in clause 6A.1.2, that is for determination by a *commercial arbitrator* under Part K of Chapter 6A.

transmission standard control service

Has the meaning given in rule 6.25(a).

transmission standard control service revenue

Has the meaning given in rule 6.26(b)(1).

transmission system

A *transmission network*, together with the *connection assets* associated with the *transmission network*, which is connected to another *transmission or distribution system*.

transmission use of system, transmission use of system service

A *Generator transmission use of system service* or a *Customer transmission use of system service.*

trigger event

In relation to a *proposed contingent project* or a *contingent project*, a specific condition or event described in clause 6A.8.1(c), the occurrence of which, during the relevant *regulatory control period*, may result in the amendment of a *revenue determination* under clause 6A.8.2.

two-terminal link

One or more *network elements* that together enable the transfer of *energy* between two, and only two, *connection points.*

type 5 accumulation boundary

The volume of *energy* for a *connection point* above which the *metering data* that is extracted or emanates from a type 5 *metering installation* must be extracted or emanate as *interval energy data* for the purpose of producing *settlements ready data*.

[**Note:** Below the type 5 accumulation boundary, the metering data may be extracted or emanate from the metering installation as accumulated energy data for the purpose of producing settlements ready data, in which case the metering installation must be registered with *AEMO* as a type 6 metering installation. Otherwise the metering data may be extracted or emanate as interval energy data for the purpose of producing settlements ready data in which case the metering installation must be registered with *AEMO* as a type 5 metering installation.]

typical accrual

Has the meaning given in clause 3.3.12(a).

uncompleted transaction

Has the meaning given in clause 3.3.16(b).

unconstrained

Free of *constraint*.

unconstrained intermittent generation forecast

The forecast prepared by *AEMO* in accordance with rule 3.7B of the *available capacity* of each *semi-scheduled generating unit*.

under-recovery amount

Any amount by which the sum of the *AARR* in previous *financial years* exceeds the revenue earned from the provision of *prescribed transmission services* in those previous years, grossed up by the application of an annual interest rate approved by the *AER* for this purpose.

unmetered connection point

A *connection point* at which a *meter* is not necessary under schedule 7.2.

unscheduled reserve

The amount of surplus or unused capacity:

(a) of *generating units* (other than *scheduled generating units*); or

(b) arising out of the ability to reduce demand (other than a *scheduled load*).

unscheduled reserve contract

A contract entered into by *AEMO* for the provision of *unscheduled reserve* in accordance with rule 3.20.

unserved energy

The amount of *energy* that is demanded, but cannot be supplied, in a *region* and which is defined in accordance with the *power system security and reliability standards* and is expressed as:

(a) GWh; or

(b) a percentage of the total *energy* demanded in that *region* over a specific period of time such as a year.

use of system

Includes *transmission use of system* and *distribution use of system.*

use of system services

Transmission use of system service and *distribution use of system service.*

violation

In relation to *power system security*, a failure to meet the requirements of Chapter 4 or the *power system security and reliability standards.*

virtual transmission node

A non-physical node used for the purpose of *market settlements*, having a *transmission loss factor* determined in accordance with clause 3.6.2(b)(3).

voltage

The electronic force or electric potential between two points that gives rise to the flow of electricity.

voltage transformer (VT)

A *transformer* for use with *meters* and/or protection devices in which the *voltage* across the secondary terminals is, within prescribed error limits, proportional to and in phase with the *voltage* across the primary terminals.

WACC

Weighted average cost of capital.

weighted average cost of capital

For a *Transmission Network Service Provider* for a *regulatory control period*, the return on capital for that *Transmission Network Service Provider* for that *regulatory control period* as calculated in accordance with clauses 6A.6.2(b) to (e), and in any other case an amount determined in a manner consistent with schedule 6.1.

For a *Distribution Network Service Provider* for a *regulatory control period*, the return on capital for that *Distribution Network Service Provider* for that *regulatory control period* calculated in accordance with clause 6.5.2.

CHAPTER 11

11. Savings and Transitional Rules

Part A Negative Inter-Regional Settlements Residue (2006 and 2009 amendments)

11.1 Rules consequent on making of the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 and on the making of the National Electricity Amendment (Negative Settlements Residue Recovery, Extension of Sunset) Rule 2009

11.1.1 Recovery of accrued negative settlements residue

(a) Clause 3.6.5(a)(4), as in force immediately before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, continues to apply to any negative *settlements residue* amounts arising before 1 July 2005 and not recovered as at 1 July 2005 until all such negative amounts have been recovered.

(b) Where negative *settlements residue* amounts arise on or after 1 July 2005 and are not recovered before 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, then:

(i) the whole or any part of the amount may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation; and

(ii) if the whole or a part of the amount is not recoverable under clause 11.1.1(b)(i), the unrecovered amount may be recovered from the proceeds of successive *auctions* until the negative amount is recovered.

(c) Clause 3.6.5(a)(4A), as in force immediately before 30 June 2010, continues to apply to any *negative settlements* residue amounts arising on or after 1 July 2006 but before 30 June 2010, and not recovered as at 30 June 2010, until all such negative amounts have been recovered.

11.1.2 Recovery of interest costs associated with accrued negative settlements residue

(a) Where interest costs interest costs incurred by *NEMMCO* in relation to any unrecovered negative *settlements residue* amounts referred to in clause 3.6.5(a)(4A) arise on or after 1 July 2005 and are not recovered before 1

July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation, then:

(i) the whole or any part of the interest costs may be recovered from the proceeds of the first *auction* after 1 July 2006 which is the date the National Electricity Amendment (Negative Inter-Regional Settlements Residue) Rule 2006 commences operation; and

(ii) if the whole or a part of the interest costs are not recoverable under clause 11.1.2(b)(i), the unrecovered interest costs may be recovered from the proceeds of successive *auctions* until the interest costs are recovered.

(b) Clause 3.6.5(a)(4B), as in force immediately before 30 June 2010, continues to apply to any interest costs arising on or after 1 July 2006 but before 30 June 2010, and not recovered as at 30 June 2010, until all such interest costs have been recovered.

Part B System Restart Ancillary Services (2006 amendments)

11.2 Rules consequent on making of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006 No.6

11.2.1 Transitional provision for acquisition of non-market ancillary services

(a) For the purposes of clause 11.2.1:

Amending Rule means the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006.

Existing *NMAS* contract means an *ancillary services agreement* between *NEMMCO* and another person to acquire *non-market ancillary services* from that person, entered into prior to the NMAS commencement date.

NMAS commencement date means the date of commencement of the National Electricity Amendment (System Restart Ancillary Services and pricing under market suspension) Rule 2006;

(b) On the *NMAS* commencement date

(1) Any action taken by *NEMMCO* or a *Rules body* prior to the *NMAS* commencement date in anticipation of the commencement of the Amending Rule is deemed to have been taken for the purpose of the Amending Rule and continues to have effect for that purpose.

(2) *NEMMCO* may continue to acquire *non-market ancillary services* under an existing *NMAS* contract and may extend the period of an existing *NMAS* contract for such period as *NEMMCO* and that person reasonably determine.

(3) At any time when no *system restart standard* under clause 8.8.3(a)(1a) is in force, *NEMMCO* must develop and *publish* an interim *system restart standard* that is:

(i) consistent with the requirements in clause 8.8.3(a); and

(ii) approved by the *Reliability Panel*;

and the interim *system restart standard* applies until such time as the *Reliability Panel* determines a *system restart standard*.

11.3 [Deleted]

Part C Dispute Resolution for Regulatory Test (2006 amendments)

11.4 Rules consequent on making of the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

11.4.1 Continuation of things done under old clause 5.6.6

(a) For the purposes of clause 11.4.1:

amending Rule means the National Electricity Amendment (Dispute Resolution for Regulatory Test) Rule 2006

commencement date means the date of commencement of the amending Rule

new clause 5.6.6 means clause 5.6.6 after the commencement of the amending Rule

old clause 5.6.6 means clause 5.6.6 before the commencement of the amending Rule.

(b) On the commencement date:

(1) any dispute commenced under the old clause 5.6.6 and not completed before the commencement date, must continue to be conducted and completed as if it were a dispute commenced in accordance with the old clause 5.6.6.

(2) Subject to clause 11.4.1(b)(1), any action taken under the old clause 5.6.6 is deemed to have been taken for the purposes of the

corresponding requirement in the new clause 5.6.6 and continues to have effect for those purposes.

Part D Metrology (2006 amendments)

11.5 Rules consequential on the making of the National Electricity Amendment (Metrology) Rule 2006

11.5.1 Definitions

For the purposes of this rule 11.5:

Amending Rule means the National Electricity Amendment (Metrology) Rule 2006.

commencement date means the day on which the Amending Rule commences operation.

old Chapter 7 means Chapter 7 of the *Rules* as in force immediately before the commencement date.

new Chapter 7 means Chapter 7 of the *Rules* as in force immediately after the commencement date.

11.5.2 Metrology procedures continues to apply until 31 December 2006

A metrology procedure as in force under the old Chapter 7 continues in force in accordance with the old Chapter 7 until 31 December 2006.

11.5.3 Responsible person

A *Local Network Service Provider* who is the responsible person for a *metering installation* under Chapter 9 of the *Rules* immediately before the commencement date continues to be the *responsible person* for that *metering installation* for the purposes of clause 7.2.3.

11.5.4 NEMMCO's responsibility to develop a metrology procedure

(a) Subject to this clause 11.5.4, *NEMMCO* must *publish* an initial metrology procedure by 1 January 2007 in accordance with the new Chapter 7 and this procedure must commence operation on 1 January 2007.

(b) The requirement in clause 7.14.1(b) that requires a minimum period of 3 months between the date the *metrology procedure* is published and the date the *metrology procedure* commences does not apply to the initial metrology procedure developed and published under this clause 11.5.4.

(c) Any action taken by *NEMMCO* for the purpose of developing and publishing an initial metrology procedure prior to the commencement date is taken to satisfy the equivalent actions required for a *metrology procedure* under the new Chapter 7.

(d) *NEMMCO* may dispense with, or not comply with, any relevant action under rule 7.14, if the action duplicates or is consistent with action that has already been taken under paragraph (c).

(e) An initial metrology procedure developed and published under this clause 11.5.4 is taken to be the *metrology procedure* for the purposes of Chapter 7 of the *Rules*.

(f) The initial metrology procedure is not required to incorporate the matters referred to in clause 7.14.1(c)(4) until 30 June 2008 and *NEMMCO* may develop a separate procedure for those matters during that period to 30 June 2008.

11.5.5 Jurisdictional metrology material in the metrology procedure

(a) For the purposes of this clause 11.5.5, **expiry date** means 1 January 2009.

(b) Until the expiry date, the *Ministers of the MCE* is taken to be each *Minister of the participating jurisdictions*, acting on behalf of that jurisdiction and undertaking the role of the *Ministers of the MCE* in relation to *jurisdictional metrology material* under clause 7.14.2.

(c) For the avoidance of doubt, a *Minister of a participating jurisdiction* may delegate the role of submitting *jurisdictional metrology material* to *NEMMCO* under paragraph (b) by instrument in writing.

(d) A certified copy of any delegation given under paragraph (c) must be provided to *NEMMCO* at the time any *jurisdictional metrology material* is submitted to *NEMMCO* under clause 7.14.2.

[**Note:** Ministers of participating jurisdiction have powers of delegation under their own jurisdictional legislation governing the procedure for conferring such delegations.]

Part E Economic Regulation of Transmission Services (2006 amendments)

11.6 Rules consequent on making of the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006

11.6.1 Definitions

Subject to this rule 11.6, in this rule 11.6:

Amending Rule 2006 means the National Electricity Amendment (Economic Regulation of Transmission Services) Rule 2006.

commencement date means the date on which the *Amending Rule* 2006 commences operation.

current regulatory control period means the regulatory control period applicable to an existing revenue determination.

distribution matters includes matters relating to the economic regulation of *distribution services*, including, but not limited to, existing determinations, decisions, instruments, agreements or any other relevant action.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing revenue determination means any determination made, or deemed to be made, by the *ACCC* or the *AER* on or prior to the commencement date for the purpose of regulating the revenues of a *Transmission Network Service Provider*.

first regulatory control period means a *regulatory control period* immediately after a current regulatory control period.

first revenue cap determination means the first *revenue cap determination* after an existing revenue cap determination.

new Chapter 6A means Chapter 6A of the *Rule*s as in force immediately after the commencement of the *Amending Rule* 2006.

old Chapter 6 means Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule* 2006.

old clause 6.5.9 means clause 6.5.9 of the *Rules* as in force immediately before the commencement of the *Amending Rule* 2006.

old Part C means Part C (Transmission Pricing) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule* 2006.

old Part F means Part F (Interconnections) of Chapter 6 of the *Rules* as in force immediately before the commencement of the *Amending Rule* 2006.

relevant action includes (without limitation) any of the following actions in relation to *distribution* matters:

(a) the performance or exercise of any function, power, obligation or right;

(b) the making or publishing of any guideline, standard, procedure, report, negotiating framework or other document;

(c) the giving, publishing, service or receipt of any communication, notice or other document;

(d) the provision or receipt of any submission or information;

(e) the making or receiving any inquiry, request or application;

(f) the undertaking or completion of any transaction;

(g) the payment of any monetary amount or fee.

renumbered Chapter 6 means Chapter 6 of the *Rules* as in force immediately after the commencement of the *Amending Rule* 2006.

SP AusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

Statement of Regulatory Principles means the Statement of Principles published by the *AER* as part of the Compendium of Electricity Transmission Regulatory Guidelines dated August 2005.

VENCorp means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994 (Vic) and continued under the Gas Industry Act 2001 (Vic).

11.6.2 New Chapter 6A does not affect existing revenue determinations

(a) Subject to this rule 11.6, the old Chapter 6 continues to apply to and in respect of, existing revenue determinations as if the new Chapter 6A had not been made.

(b) The Amending Rule 2006 has no effect on the continuing operation of clause 9.8.4G.

(c) The Amending Rule 2006 has no effect on the continuing operation of clause 9.16.5 in so far as it:

(1) applies to deem a revenue cap for the *financial year* commencing on 1 July 2004;

(2) specifies the basis on which prices for certain transmission services during the *financial year* commencing on 1 July 2004 are to be determined;

(3) specifies the manner in which clause 6.4.3C of the old Chapter 6 is to apply for the *financial year* commencing on 1 July 2005; and

(4) deems a revenue cap for the period commencing on 1 July 2004 until the end of 30 June 2009 to be for a period of five years.

11.6.3 Old Part C and Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6

Subject to this rule 11.6 and rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8) continues to apply for the duration of a current regulatory control period.

11.6.4 Old Part F of Chapter 6

Subject to this rule 11.6, old Part F of Chapter 6 continues to apply for the duration of a current regulatory control period.

11.6.5 Application of new Chapter 6A to Transmission Network Service Providers

Subject to this rule 11.6, a *Transmission Network Service Provider* is not required to submit a *Revenue Proposal* or a proposed *negotiating framework* to the *AER* under the new Chapter 6A until a date that is 13 months before the expiry of a current regulatory control period.

11.6.6 Application of Chapter 6 to old distribution matters

(a) The restructuring and renumbering of provisions of the old Chapter 6 by the *Amending Rule* 2006 does not affect:

(1) *distribution* matters occurring or in existence before the commencement date; or

(2) anything done or omitted to be done in respect of *distribution* matters before the commencement date.

(b) Without limiting paragraph (a), anything done or omitted to be done under a provision of the old Chapter 6 in respect of *distribution* matters before the commencement date is deemed to have been done or omitted to be done under the corresponding provision of that Chapter as restructured and renumbered by the *Amending Rule* 2006, as if that Rule had been in operation when the thing was done or omitted to be done.

11.6.7 References to the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to the old Chapter 6 in a document (however described) is deemed to be a reference to the renumbered Chapter 6 or the new Chapter 6A (as the case may be).

11.6.8 References to provisions of the old Chapter 6

Unless the context otherwise requires, on and from the commencement date every reference to a provision of the old Chapter 6 in a document (however described) is deemed to be a reference to the corresponding provision of the renumbered Chapter 6 or the corresponding provision (if any) of the new Chapter 6A (as the case may be).

11.6.9 Roll forward of regulatory asset base for first regulatory control period

In making a *revenue determination* for the first *regulatory control period*, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to an existing revenue determination and any other arrangements agreed between the *AER* and the *Transmission Network Service Provider.*

11.6.10 Other adjustment carry-over mechanisms from current to first regulatory control period

The *maximum allowed revenue* that a *Transmission Network Service Provider* may earn in any *regulatory year* of the first *regulatory control period* may be adjusted for any carry-over mechanisms provided for in the relevant existing revenue determination and in any other arrangements agreed between the *AER* and the *Transmission Network Service Provider* for the purposes of, and in accordance with, the existing revenue determination.

11.6.11 Clause consequent upon making National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule No 2009 No 3 - Transition to new Chapter 6A: existing prescribed connection services

Definitions

(a) In this clause 11.6.11:

existing asset means an asset that as at 9 February 2006:

(1) was used in connection with a *transmission system* where the value, or a portion of the value, of that asset was included in the regulatory asset base; or

(2) was committed to be constructed for use in connection with a *transmission system* where the forecast value, or a portion of the forecast value, of that asset was included in the forecast capital expenditure,

for that *transmission system* under a revenue determination in force as at 9 February 2006.

For the purpose of this definition, an asset is, and is only, to be taken to be committed to be constructed if it satisfied the criteria which a project needed to satisfy to be a "committed project" for the purpose of the *regulatory test* in force as at 9 February 2006.

replacement asset means:

(1) an asset which replaces an existing asset after 9 February 2006; or

(2) an asset which replaces an asset referred to in this clause 11.6.11(a) after 9 February 2006.

For the purpose of this definition, an asset will be treated as replacing another asset even if it provides an increased or different functionality to the asset it replaces, provided that the increased or different functionality was not requested by the relevant *Transmission Network User*.

eligible asset means, subject to clause 11.6.11(d)(3):

(1) an existing asset which was, immediately before the commencement date, or was or is, when first commissioned after the commencement date, wholly and exclusively used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and

(2) a replacement asset which is wholly and exclusively used after the commencement date by a *Transmission Network Service Provider* to continue providing *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

and excludes:

(3) an existing asset or a replacement asset to the extent that it ceases to be used after the commencement date to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*; and

(4) an existing asset or replacement asset that, as at the 2009 commencement date, was wholly and exclusively used by a

Transmission Network Service Provider to provide connection services to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* but had all of its costs treated as directly attributable to, or incurred in providing, *transmission use of system services* at that date.

prescribed connection service means a *connection service* provided by a *Transmission Network Service Provider* to a *Transmission Network User* at a *transmission network connection point* on or after the 2009 commencement date in respect of which the following criteria are satisfied:

(1) the relevant service is provided by using assets that include eligible assets;

(2) the whole of the relevant service is being provided under a *connection agreement* which was first entered into before the commencement date (as extended, amended or novated from time to time);

(3) the *connection agreement* has not at any time after the 2009 commencement date been amended at the request of the *Transmission Network User* for the purposes of altering the relevant service; and

(4) the relevant service would not otherwise be a *prescribed transmission service* for the purposes of new Chapter 6A but for this clause 11.6.11.

If, at the date a *Transmission Network Service Provider* submits a *Revenue Proposal* after the 2009 commencement date to the *AER* under new Chapter 6A, a *connection service* does not satisfy each of the above criteria, then the *connection service* remains a prescribed connection service until the start of the next *regulatory control period* to which the *Revenue Proposal* relates, from which time it ceases to be a prescribed connection service.

2009 commencement date means the date on which the National Electricity Amendment (Cost Allocation Arrangements for Transmission Services) Rule 2009 commences operation.

Prescribed transmission services

(b) References to *prescribed transmission services* in new Chapter 6A include prescribed connection services and, where a service is a *prescribed transmission service* by virtue of the operation of this clause 11.6.11, that service is taken not to be a *negotiated transmission service*.

Interaction with new Chapter 6A

(c) For the purposes of new Chapter 6A:

(1) the costs of the *transmission system* assets that from time to time may be treated as:

(i) directly attributable to the provision of a prescribed connection service; or

(ii) incurred in providing a prescribed connection service,

to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point* are limited to the costs of the eligible assets which, from time to time, provide that prescribed connection service;

(2) any costs of an existing asset or a replacement asset (or of any portion of an existing asset or a replacement asset) that:

(i) is not an eligible asset (other than as a result of clause 11.6.11(d)); and

(ii) is used by a *Transmission Network Service Provider* to provide *connection services* to a *Transmission Network User* or a group of *Transmission Network Users* at a *transmission network connection point*,

must be treated as costs that are directly attributable to the provision of, or are incurred in providing, *prescribed TUOS services* and, to avoid doubt, the services provided by those assets which would otherwise be *connection services* are taken to be *prescribed TUOS services*; and

(3) the *stand-alone amount* for *prescribed TUOS services* is taken to include any portion of the costs referred to in clause 11.6.11(c)(2) that has not been allocated under clause 6A.23.2(d)(1).

Cessation of prescribed connection services

(d) If a *connection service* ceases to be a prescribed connection service at the start of a *regulatory control period* for the relevant *Transmission Network Service Provider*:

(1) the *connection service* is taken to be a *negotiated transmission service*;

(2) despite clause 6A.19.2(7), the costs which were allocated to the prescribed connection service may be reallocated to *negotiated transmission services*;

(3) the eligible assets that previously provided the prescribed connection service cease to be eligible assets; and

(4) despite clause S6A.2.3, the value of the eligible assets which previously provided the prescribed connection service may be removed from the regulatory asset base of the *Transmission Network Service Provider*.

11.6.12 Powerlink transitional provisions

Definitions

(a) In this clause 11.6.12:

contingent project means a project identified in the transitional revenue determination as a contingent project.

Powerlink means the Queensland Electricity Transmission Corporation Limited (ACN 078 849 233), trading as Powerlink Queensland .

transitional regulatory control period means the regulatory control period commencing on 1 July 2007 and ending on 30 June 2012.

transitional revenue determination means a final revenue determination by the *AER* for the Powerlink transmission network, in respect of the transitional regulatory control period.

trigger means the unique investment driver identified in the transitional revenue determination as a trigger for a contingent project.

Scope and application

(b) This clause 11.6.12:

(1) applies only in respect of the Powerlink *transmission network* and applies only until 30 June 2012; and

(2) prevails, to the extent of any inconsistency, over any other clause in the *Rules*.

Transitional revenue determination

(c) Except as provided in this clause 11.6.12, and despite any changes to the old Chapter 6:

(1) the old Chapter 6 continues to apply in respect of the *AER* setting the revenue cap for the transitional regulatory control period for the Powerlink *transmission network*; and

(2) in setting the revenue cap for the transitional regulatory control period, the *AER* must substantially adhere to the Statement of

Regulatory Principles including the ex ante approach to setting the revenue cap set out in the statement.

(d) The *AER* must calculate the *weighted average cost of capital* for the transitional regulatory control period, in accordance with the values, methodologies or benchmarks in the new Chapter 6A, in respect of the following items:

(1) the nominal risk free rate including the maturity period and source of the benchmark;

(2) the debt risk premium including the maturity period and source of the benchmark;

(3) the equity beta;

(4) the market risk premium; and

(5) the ratio of the market value of debt as a proportion of the market value of equity and debt.

(e) In calculating the *WACC* for the transitional regulatory control period, the *AER* must use an average gamma of 0.5.

Contingent projects

(f) Where the trigger event identified in respect of a contingent project occurs prior to 30 June 2012, the *AER* must, in accordance with the transitional revenue determination:

(1) determine:

(i) the amount of capital and incremental operating expenditure for that contingent project for each remaining regulatory year of the transitional regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project;

(ii) the likely commencement and completion dates for the contingent project;

(iii) the incremental revenue which is likely to be earned by Powerlink in each remaining regulatory year of the transitional regulatory control period as a result of the contingent project being undertaken; and

(iv) the *maximum allowed revenue* for each regulatory year in the remainder of the transitional regulatory control period by adding the incremental revenue for that regulatory year; and

(2) calculate the estimate referred to in subparagraph (1)(iii):

(i) on the basis of the rate of return for Powerlink for the transitional regulatory control period in accordance with the transitional revenue determination; and

(ii) consistently with the manner in which depreciation is calculated under the transitional revenue determination; and

(3) amend the transitional revenue determination to apply for the remainder of the transitional regulatory control period in accordance with paragraph (g).

(g) The *AER* may only vary the transitional revenue determination to the extent necessary:

(1) to adjust the forecast capital expenditure for the transitional regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (f)(1)(i);

(2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (f)(1)(i); and

(3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the transitional regulatory control period.

(h) An application for approval of a contingent project may only be made if the intended date for commencing the contingent project is during the transitional regulatory control period.

(i) For the first *regulatory control period* after the transitional regulatory control period, the forecast of capital expenditure for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 of the new Chapter 6A, in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

Cost pass-through

(j) For the duration of the transitional regulatory control period:

(1) subject to subparagraph (2), clause 6A.7.2 of the new Chapter 6A applies to a *network support event* under the transitional revenue determination;

(2) the process to apply to the calculation, presentation and approval of pass through resulting from a network support event is as set out in the transitional revenue determination; and

(3) in respect of any *positive change event* or *negative change event*, the new Chapter 6A applies, with any modifications that are necessary to apply the relevant provisions to the transitional revenue determination.

Roll forward of regulatory asset base

(k) For the avoidance of doubt, in making a *revenue determination* for the first *regulatory control period* after the transitional regulatory control period, the value of the regulatory asset base at the beginning of the first *regulatory year* of that period calculated in accordance with clause S6A.2.1(f), may be adjusted having regard to the transitional revenue determination and any other arrangements agreed between the *AER* and Powerlink.

Application of efficiency benefit sharing scheme

(l) The *efficiency benefit sharing scheme* in force under clause 6A.6.5 applies to Powerlink during the transitional regulatory control period.

Power to re-open transitional revenue determination

(m) Clause 6A.7.1 applies to the transitional revenue determination, and a reference in the clause to:

(1) "revenue determination" is taken to be a reference to the transitional revenue determination;

(2) "regulatory control period" is taken to be a reference to the transitional regulatory control period;

(3) "contingent project" has the meaning referred to in paragraph (a); and

(4) "X Factor" has the same meaning as in the transitional revenue determination.

(n) Subject to rule 11.8, old Part C (including Schedules 6.2, 6.3, 6.4, 6.7 and 6.8 of old Chapter 6) continues to apply for the duration of the transitional regulatory control period

11.6.13 ElectraNet easements transitional provisions

(a) In this clause 11.6.13:

current regulatory control period means the regulatory control period for ElectraNet commencing on 1 January 2003 and ending on 30 June 2008.

Determination means the South Australian Transmission Network Revenue Cap Decision of the *ACCC* dated 11 December 2002.

easement means easements referred to in the Determination.

(b) Without limiting the operation of the new Chapter 6A, in establishing the opening regulatory asset base for ElectraNet for the regulatory control period subsequent to ElectraNet's current regulatory control period, the *AER* may also consider adjustments to the regulatory asset base for ElectraNet that relate to easements, as agreed by letter dated 3 August 2004, between the *ACCC* and ElectraNet.

11.6.14 TransGrid contingent projects

(a) In this clause 11.6.14:

contingent project means a project identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the "Final Decision, NSW and ACT Transmission Network Revenue Cap TransGrid 2004-05 to 2008-09" dated 27 April 2005 determined by the *ACCC* pursuant to clause 6.2.4(b) of the National Electricity Code.

TransGrid means the energy services corporation constituted under section 6A of the Energy Services Corporations Act 1995 (NSW) and specified in Part 1A of Schedule 1 to that Act.

(b) For the purposes of the application of clause 11.6.2(a) to the Determination, a reference to the old Chapter 6 is a reference to the old Chapter 6 as modified by rule 8A.1.

(c) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for TransGrid for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.15 Transmission determination includes existing revenue determinations

The definition of a *transmission determination* may, where the context so requires, include a determination (or substituted determination) made, or deemed to be made, by the *AER* or the *ACCC* prior to the commencement date.

11.6.16 References to regulatory control period

A reference to a *regulatory control period* may, where the context so requires, include a period during which a revenue cap applied by virtue of a determination (or substituted determination) made, or deemed to be made, by the *AER* or the *ACCC* prior to the commencement date.

11.6.17 Consultation procedure for first proposed guidelines

(a) In this clause 11.6.17:

guideline means:

(1) the *post-tax revenue model* referred to in rule 6A.5.2;

(2) the *roll forward model* referred to in rule 6A.6.1;

(3) an *efficiency benefit sharing scheme* referred to in rule 6A.6.5;

(4) a *service target performance incentive scheme* referred to in rule 6A.7.4;

(5) *submission guidelines* referred to in rule 6A.10.2; and

(6) *Cost Allocation Guidelines* referred to in rule 6A.19.3.

(b) The *AER* must develop and *publish* the first proposed guidelines on or before 31 January 2007, and may carry out consultation in the preparation of those proposed guidelines as the *AER* considers appropriate.

(c) Each proposed guideline must be *published* in accordance with the requirements of rule 6A.20(b), including an explanatory statement and an invitation for written submissions.

(d) The invitation for written submissions for the proposed guidelines must allow no less than 60 *business days* for the making of submissions.

(e) The *AER* may *publish* papers and hold conferences or information sessions in relation to the proposed guidelines as provided by rule 6A.20(d).

(f) Rule 6A.20(e)-(f) applies to the publication of the final decision of the *AER* in relation to the first guidelines, which must be published under rule 6A.20 on or before 30 September 2007.

11.6.18 Reliance on proposed guidelines for SP AusNet, VENCorp and ElectraNet

(a) In this clause 11.6.18:

guideline has the same meaning as in clause 11.6.17.

proposed guideline means a proposed guideline published under clause 11.6.17.

relevant provider means SP AusNet, VENCorp or ElectraNet.

2008 determination means a transmission determination to be made in 2008 for a relevant provider.

(b) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, anything that must be done in accordance with a guideline must instead be done in accordance with the corresponding proposed guideline.

(c) Unless sooner revoked, a proposed guideline ceases to have effect in relation to a relevant provider at the end of the regulatory control period covered by a 2008 determination applying to the provider. For the avoidance doubt, a proposed guideline does not apply to or in respect of the making of a subsequent transmission determination.

(d) For the purposes of making a 2008 determination for the regulatory control period to be covered by a 2008 determination, a relevant provider is taken to have complied with a requirement to comply with a *Cost Allocation Methodology* under the new Chapter 6A if the *AER* is satisfied that the relevant provider has complied with the relevant proposed guideline for cost allocation referred to in clause 11.6.17(a)(6), but only until the *AER* has approved a *Cost Allocation Methodology* for that provider under clause 6A.19.4.

11.6.19 EnergyAustralia transitional provisions

(a) In this clause 11.6.19:

contingent project means a project approved by the *ACCC* and identified in the Determination as a contingent project.

current regulatory control period means the period 1 July 2004 to 30 June 2009.

Determination means the "Final Decision, NSW and ACT Transmission Network Revenue Cap EnergyAustralia 2004-05 to 2008-09".

EnergyAustralia means the energy services corporation constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act.

maximum allowed revenue means the maximum allowed revenue in the Determination.

trigger event means an event identified as a trigger in Appendix A of the Determination in respect of a contingent project.

triggered contingent project means the contingent project referred to in Appendix A of the Determination as "A.1 Replacement of Feeders 908/909".

Application of Chapter 6A to Determination

(b) Subject to paragraph (c), clauses 6A.7.1, 6A.7.2 and 6A.7.3 apply to the Determination from the commencement date.

(c) In applying clause 6A.7.1 to the Determination, a reference in the clause to:

(1) "revenue determination" is taken to be a reference to the Determination;

(2) "regulatory control period" is taken to be a reference to the current regulatory control period;

(3) "contingent project" has the meaning referred to in paragraph (a); and

(4) "X Factor" has the same meaning as in the Determination.

Treatment of contingent projects

(d) Where the trigger event identified in respect of a contingent project occurs prior to 1 July 2009, the *AER* must, in accordance with the Determination:

(1) determine:

(i) the total capital expenditure which the AER considers is reasonably required for the purpose of undertaking the *contingent project* including any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project;

(ii) the forecast capital and incremental operating expenditure for that contingent project (in addition to any amount for forecast capital expenditure already included in the Determination in respect of the triggered contingent project) for each remaining regulatory year of the current regulatory control period, which the *AER* considers is reasonably required for the purpose of undertaking the contingent project in accordance with Appendix A of the Determination;

(iii) the likely commencement and completion dates for the contingent project;

(iv) the incremental revenue which is likely to be earned by EnergyAustralia in each remaining regulatory year of the current regulatory control period as a result of the contingent project being undertaken; and

(v) the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period by adding the incremental revenue for that regulatory year;

(2) calculate the estimate referred to in subparagraph (1)(iv) in accordance with the Determination, including:

(i) on the basis of the rate of return for EnergyAustralia for the current regulatory control period; and

(ii) consistently with the manner in which depreciation is calculated under the Determination; and

(3) vary the Determination to apply for the remainder of the current regulatory control period in accordance with paragraph (e).

(e) The *AER* may only vary the Determination to the extent necessary:

(1) to adjust the forecast capital expenditure for the current regulatory control period to accommodate the amount of additional capital expenditure determined under paragraph (d)(1)(ii); and

(2) to adjust the forecast operating expenditure for the current regulatory control period to accommodate the amount of additional operating expenditure determined under paragraph (d)(1)(ii); and

(3) to reflect the effect of any resultant increase in forecast capital expenditure and incremental operating expenditure on the maximum allowed revenue for each regulatory year in the remainder of the current regulatory control period.

(f) The intended date for commencing the contingent project must be during the current regulatory control period.

(g) For the first *regulatory control period* after the current regulatory control period, the forecast of capital expenditure for EnergyAustralia for that first *regulatory control period* must be determined by applying the provisions of clause 6A.6.7 in respect of the capital expenditure for a contingent project, with such modifications as are necessary to properly apply clause 6A.6.7.

11.6.20 Basslink transitional provisions

Definitions

(a) In this clause 11.6.20:

Basslink has the meaning provided in the *Electricity Supply Industry Act 1995* of Tasmania, and means the interconnection between the electricity grids of the States of Tasmania and Victoria by means of:

(1) a high voltage, direct current, submarine cable across Bass Strait;

(2) converter stations in those States;

(3) direct current connecting lines to those converter stations;

(4) alternating current transmission connections to the transmission networks of those States; and

(5) related infrastructure.

previous regulatory approach means the methodologies, objectives and principles for determination of a regulatory asset base applied in the previous regulatory determinations.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

(1) by the *ACCC,* entitled the "Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue" dated 1 October 2003; and

(2) by the *AER,* entitled "Directlink Joint Ventures' Application for Conversion and Revenue Cap" dated 3 March 2006.

Application

(b) Where, after the commencement date, a service provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*:

(1) paragraph (c) applies to that service to the exclusion of clause 2.5.2(c); and

(2) paragraphs (d),(e),(f) and (g) apply to that service to the exclusion of clause S6A.2.1(e)(1) and (2).

(c) If, after the commencement date, a *network service* provided by means of, or in connection with, the Basslink *transmission system* ceases to be classified as a *market network service*, it may at the discretion of the *AER* be determined to be a *prescribed transmission service*, in which case the relevant *total revenue cap* may be adjusted in accordance with Chapter 6A

and this clause 11.6.20 to include to an appropriate extent the relevant *network* elements which provide those *network services*.

(d) Where services are determined to be *prescribed transmission services* as referred to in paragraph (c), the value of the regulatory asset base, as at the beginning of the first *regulatory year* of the first *regulatory control period* for which those *prescribed transmission services* are to be regulated under a *revenue determination*, is the amount that is determined by the *AER* in accordance with paragraphs (e), (f) and (g).

(e) Subject to paragraph (f), the *AER* must determine the value of the regulatory asset base for the Basslink *transmission system* for the purposes of paragraph (d) by applying the previous regulatory approach to the circumstances of that *transmission system*.

(f) In the event of an inconsistency between the previous regulatory approach adopted in each of the previous regulatory determinations, the approach adopted in a decision of the *AER* regarding the Directlink *transmission system* prevails over the approach adopted in the decision of the *ACCC* regarding the Murraylink *transmission system* to the extent of the inconsistency.

(g) Without limiting paragraph (e), the *AER* must, when exercising any discretion in relation to the application of paragraph (e) above:

(1) have regard to the prudent and efficient value of the assets that are used by the relevant *Transmission Network Service Provider* to provide those *prescribed transmission services* (but only to the extent that those assets are used to provide such services); and

(2) for this purpose, determine that value having regard to the matters referred to in clause S6A.2.2.

11.6.21 SPI Powernet savings and transitional provision

Definitions

(a) In this clause 11.6.21:

easements tax change event means a *change* in the amount of land *tax* that is payable by SPI PowerNet in respect of the easements which are used for the purposes of SPI PowerNet's *transmission network*. For the purposes of this definition, the *change* in the amount of land tax that is payable by SPI PowerNet must be calculated as the difference between:

(1) the amount of land tax that is payable in each *regulatory year* by SPI PowerNet, as advised by the Commissioner of State Revenue, Victoria; and

(2) the amount of land tax which is forecast for the purposes of and included in the *revenue determination* for each *regulatory year* of the *regulatory control period*.

Regulated owner and **SPI PowerNet** both have the meaning provided in clause 9.3.1(2) of the *Rules*.

Transition to new Chapter 6A: existing prescribed transmission services

(b) Notwithstanding clause 11.5.11, references to *prescribed transmission services* in the new Chapter 6A include a service provided by an asset used in connection with, or committed to be constructed for use in connection with, a *transmission system* as at 9 February 2006, where that asset is the subject of an agreement between SPI PowerNet and any of:

(1) VENCorp;

(2) a Distributor;

(3) a Regulated owner;

(4) a *Generator*; or

(5) a *Market Network Service Provider*,

and:

(6) the agreement provides or contemplates that following an interim period the relevant asset will become subject to regulation under a revenue determination applicable to SPI PowerNet; and

(7) in the case of an agreement with a *Generator* or a *Market Network Service Provider,* the service the subject of the agreement is for *connection assets* provided on a non-contestable basis.

Method of adjustment of value of regulatory asset base

(c) For the avoidance of doubt, in adjusting the previous value of the regulatory asset base for SPI PowerNet's *transmission system* as required by clause S6A.2.1(f), the previous value of the regulatory asset base must be increased by the amount of capital expenditure specified in, or that forms the basis of, agreements pursuant to which SPI PowerNet constructed assets during the previous regulatory control period used to provide *prescribed transmission services*, adjusted for outturn inflation and depreciation in accordance with the terms of those agreements.

(d) For the purposes of a *revenue determination* for SPI PowerNet (including but not limited to, a 2008 determination as defined in clause 11.6.18(a)) and clause 6A.7.3, easements tax change event is deemed to be:

(1) a *pass through event*; and

(2) a *positive change event* or *negative change event*, as the case may be, whether or not the easements tax change event would be *material* for the purposes of those definitions.

11.6.22 Interim arrangements pricing-related information

(a) Clause 6.2.5(a1) as in force immediately before the commencement date continues to apply during the current regulatory control period.

(b) The *information guidelines* may, in addition to the matter referred to in clause 6A.17.2(e), require the inclusion in the certified annual statements of:

(1) information on the amount of each instance, during the relevant reporting period, of any reduction in the prices payable by a *Transmission Customer* for *prescribed transmission services* provided by the *Transmission Network Service Provider*;

(2) information on each instance, during the relevant reporting period, of a reduction in the prices payable by a *Transmission Customer* for *prescribed transmission use of system services* or *prescribed common transmission services* (or both) that were recovered from other *Transmission Customers* for *prescribed transmission use of system services* or *prescribed common transmission services*; and

(3) information to substantiate any claim by the *Transmission Network Service Provider* that the information provided to the *AER* with respect to reductions in the prices payable by a *Transmission Customer* for the relevant *prescribed transmission services* under subparagraphs (2) or (3) is confidential information.

Part F Reform of Regulatory Test Principles (2006 amendments)

11.7 Rules consequent on making of the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19

11.7.1 Definitions

For the purposes of this rule 11.7:

Amending Rule means the National Electricity Amendment (Reform of the Regulatory Test Principles) Rule 2006 No.19.

commencement date means the date on which the Amending Rule commences operation.

current application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test*, and is not completed as at the commencement date.

new clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately after the commencement of the Amending Rule.

old clause 5.6.5A means clause 5.6.5A of the *Rules* as in force immediately before the commencement of the Amending Rule.

transitional application means any action taken or process commenced under the *Rules*, which relies on or is referenced to, the *regulatory test* and is not completed on 31 December 2007, or the date on which amendments (if any) to the *regulatory test* commence, whichever is the earlier.

11.7.2 Amending Rule does not affect old clause 5.6.5A

(a) On the commencement date, the *regulatory test* promulgated by the *AER* in accordance with the old clause 5.6.5A and in effect immediately before the commencement date, continues in effect and is taken to be consistent with the new clause 5.6.5A until 31 December 2007.

(b) Old clause 5.6.5A, and the *regulatory test* promulgated under that clause 5.6.5A, continues to apply to and in respect of, any current application and any transitional application.

Part G Pricing of Prescribed Transmission Services (2006 amendments)

11.8 Rules consequent on making the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006

11.8.1 Definitions

Subject to this rule 11.8, in this rule 11.8:

agreed interim requirements means interim requirements that are equivalent to the requirements of the *pricing methodology guidelines* referred to in rule 6A.25 and have been developed in consultation with the relevant providers for the purposes of a proposed 2008 pricing methodology.

ElectraNet means ElectraNet Pty Ltd ACN 094 482 416 trading as ElectraNet.

existing assets means *transmission system* assets in existence as at 24 August 2006.

previous regulatory determinations means the decision (including the reasons for decision) made under clause 2.5.2(c) of the National Electricity Code or clause 2.5.2(c) of the *Rules* (as the case may be):

(1) by the *ACCC*, entitled the "Murraylink Transmission Company Application for Conversion and Maximum Allowable Revenue" dated 1 October 2003; and

(2) by the *AER*, entitled "Directlink Joint Ventures' Application for Conversion and Revenue Cap" dated 3 March 2006.

Pricing Rule commencement date means the date on which the National Electricity Amendment (Pricing of Prescribed Transmission Services) Rule 2006 commences operation.

relevant provider means SPAusNet, ElectraNet or VENCorp.

SPAusNet means SPI PowerNet Pty Ltd ACN 079 798 173.

2008 pricing methodology means a pricing methodology to be made in 2008 for a relevant provider.

VENCorp means the Victorian Energy Networks Corporation established under the Gas Industry Act 1994(Vic) and continued under the Gas Industry Act 2001(Vic).

11.8.2 Regulated interconnectors

(a) All *interconnectors* that formed part of the *power system* in the *participating jurisdictions* as at 31 December 1997 continue to be taken to be *regulated interconnectors*.

(b) All *interconnectors* that ceased to be classified as a *market network service* by a previous regulatory determination made before 28 December 2006 are taken to be *regulated interconnectors*.

(c) All *interconnectors* that, by a decision made after 28 December 2006 under clause 2.5.2(c) of the *Rules* cease to be classified as a *market network service* are taken to be *regulated interconnectors*.

11.8.3 Application of new Part J of Chapter 6A to Transmission Network Service Providers

(a) Subject to this rule 11.8, a *Transmission Network Service Provider* is not required to submit a proposed *pricing methodology* to the *AER* under the new Part J of Chapter 6A until a date that is 13 months before the expiry of a current *regulatory control period*.

(b) For the purposes of this clause 11.8.3, the transitional regulatory control period referred to in rule 11.6.12 (a) for Powerlink is taken to be the current *regulatory control period*.

11.8.4 Reliance on agreed interim guideline for ElectraNet, SPAusNet, and VenCorp

For the purpose of making a 2008 pricing methodology, anything that must be done in accordance with the *pricing methodology guidelines* must instead be done in accordance with the agreed interim requirements.

11.8.5 Prudent discounts under existing agreements

(a) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 10 October 2001 so long as the agreement remains in effect and its terms are not renegotiated.

(b) A *Transmission Network Service Provider* may continue to recover discounts arising as a result of agreements that were entered into prior to 28 December 2006 so long as the agreement remains in effect and its terms are not renegotiated.

(c) The *AER* is not required to re-approve discounts arising under paragraphs (a) or (b) that were approved prior to 28 December 2006, and any approval for the recovery of such discounts is valid so long as the agreement between the *Transmission Network Service Provider* and the *Transmission Customer* remains in effect and its terms are not renegotiated.

11.8.6 Application of prudent discounts regime under rule 6A.26

(a) Despite clause 11.6.3, a *Transmission Network Service Provider* may apply rule 6A.26 during a current regulatory control period (as defined in clause 11.6.1).

(b) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraph (a) applies, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that there is no approved *pricing methodology* for that provider.

11.8.7 Prudent discounts pending approval of pricing methodology

(a) This clause 11.8.7 applies where:

(1) a *Transmission Network Service Provider* has submitted or resubmitted a proposed *pricing methodology* to the *AER* under clause 6A.10.1, 6A.11.2 or 6A.12.3;

(2) the *AER* has not made a final decision approving or amending that methodology under rule 6A.13; and

(3) a *Transmission Customer* requests the provider to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined in accordance with the provider's *pricing methodology* as referred to in clause 6A.26.1(d).

(b) Despite clause 6A.26.1, a *Transmission Network Service Provider* may agree to charge lower prices for *prescribed TUOS services* or *prescribed common transmission services* than the prices determined as referred to in clause 6A.26.1(d) in accordance with:

(1) in the case where the *AER* has made a draft decision in which it proposes to approve a proposed *pricing methodology,* - that proposed *pricing methodology*; or

(2) if subparagraph (1) does not apply, the *pricing methodology* most recently approved for that *Transmission Network Service Provider* prior to the proposed *pricing methodology* referred to in subparagraph (a)(1); or

(3) if there is no a previously approved *pricing methodology* for that *Transmission Network Service Provider,* - the previous method used by the *Transmission Network Service Provider* to establish prices, however determined must be used in place of an approved *pricing methodology*.

(c) Where a *Transmission Network Service Provider* applies to the *AER* under clause 6A.26.2 for approval to recover a proposed recovery amount in circumstances where paragraphs (a) and (b) apply, the *AER* must make a determination in accordance with clause 6A.26.2 notwithstanding that the reduced charges were agreed before a *pricing methodology* was approved.

(d) The subsequent approval by the *AER* of a *pricing methodology* for a *Transmission Network Service Provider* does not require the provider to adjust, reverse or recompense any amounts to *Transmission Customers* in connection with charges for services established pursuant to this clause 11.8.7.

Part H Reallocations (2007 amendments)

11.9 Rules consequent on the making of the National Electricity Amendment (Reallocations) Rule 2007

11.9.1 Definitions

For the purposes of this rule 11.9:

Amending Rule means the National Electricity Amendment (Reallocations) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

existing reallocation means a *reallocation* in place immediately before the commencement date.

new reallocation means a *reallocation* undertaken in accordance with the *Rules* after the date of *publication* of the *reallocation procedures* under clause 3.15.11A(d).

transitional reallocation means a *reallocation* in place immediately after the commencement date but prior to the date of *publication* of the *reallocation procedures* by *NEMMCO* under clause 3.15.11A(d).

11.9.2 Existing and transitional reallocations

(a) Subject to paragraph (c), an existing reallocation is to be treated as if the Amending Rule had not been made.

(b) Subject to paragraph (c), a transitional reallocation is to be treated as if the Amending Rule had not been made.

(c) A *Market Participant* who is a party to an existing reallocation or a transitional reallocation may elect to have the reallocation treated as a new reallocation if the participant obtains the agreement of the *Market Participant* who is the other party to the reallocation.

Part I Technical Standards for Wind Generation (2007 amendments)

11.10 Rules consequent on making of the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007

11.10.1 Definitions

Subject to this rule 11.10, in this rule 11.10:

Amending Rule means the National Electricity Amendment (Technical Standards for Wind Generation and other Generator Connections) Rule 2007.

commencement date means the date on which the Amending Rule commences operation.

new Chapter 5 means Chapter 5 of the *Rules* in force immediately after the commencement date.

old Chapter 5 means Chapter 5 of the *Rules* in force immediately prior to the commencement date.

11.10.2 Provision of information under S5.2.4 in registration application

(a) Any requirements in the Amending Rule that require a person who is applying to be a *Registered Participant* to submit information in relation to clause S5.2.4 for the purposes of clause 2.9.2 does not apply to any person who has, in accordance with clause 2.9.1:

(1) submitted an application to be registered as a *Registered Participant*;

(2) commenced a process for submitting further information in relation to the application referred to in subparagraph (1); or

(3) has submitted further information in relation to the application referred to in subparagraph (1),

and, at the commencement date, has not been registered by *NEMMCO* in accordance with clause 2.9.2 as a *Registered Participant*.

(b) A person registered in accordance with this clause 11.10.2:

(1) subject to subparagraph (2), is taken to be registered in accordance with the requirements of the *Rules* as amended by the Amending Rule; and

(2) must submit all information required under clause S5.2.4 within six months of the commencement date.

11.10.3 Access standards made under the old Chapter 5

(a) Any *automatic access standard* or *negotiated access standard* that applied to a *generating unit or generating system* under the old Chapter 5 continues to apply to that system or unit as if the Amending Rule had not been made.

(b) Unless a *Generator* and a *Network Service Provider* otherwise agree, a *negotiated access standard* that is the subject of a negotiating process as at the commencement date, is to be negotiated in accordance with the old Chapter 5, as if the Amending Rule had not been made.

11.10.4 Modifications to plant by Generators

Unless the *Generator* and the relevant *Network Service Provider* otherwise agree, a *Generator* who at the commencement date has proposed to modify a *plant* and has commenced negotiations with a *Network Service Provider* under the old Chapter 5 is to continue the negotiating process in accordance with the old Chapter 5 as if the Amending Rule had not been made.

11.10.5 Technical Details to Support Application for Connection and Connection Agreement

(a) Subject to paragraphs (b) and (c), any decision or action taken by *NEMMCO* for the purpose of developing and *publishing* an initial *Generating System Design Data Sheet*, an initial *Generating System Setting Data Sheet* and initial *Generating System Model Guidelines* under clause S5.5.7 prior to the commencement date has continuing effect as if the decision had been made or the action had been taken under the Amending Rule.

(b) Pending the final *publication* of the *Generating System Design Data Sheet* and the *Generating System Setting Data Sheet* under clause S5.5.7:

(1) schedule 5.5.1 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Design Data Sheet*; and

(2) schedule 5.5.2 of the *Rules* as in force immediately before the commencement date is taken to be the interim *Generating System Setting Data Sheet*.

(c) The interim *Generating System Design Data Sheet* and interim *Generating System Setting Data Sheet* referred to in paragraph (b) continue in force until *NEMMCO publishes* the equivalent data sheet under S5.5.7 which must be no later than 29 February 2008.

11.10.6 Transitional arrangements for establishment of performance standards

For the purposes of the definition of performance requirement in clause 4.16.1, clauses S5.2.8 and S5.2.9 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10.7 Jurisdictional Derogations for Queensland

(a) For the purposes of clause 9.37.12, clause S5.2.5.2(c) of the old Chapter 5 applies as if the Amending Rule had not been made.

(b) For the purposes of clause 9.37.21, clause S5.2.5.13 of the old Chapter 5 applies as if the Amending Rule had not been made.

11.10A Rules consequent on the making of the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008

11.10A.1 Definitions

In this rule 11.10A:

Amending Rule means the National Electricity Amendment (Central Dispatch and Integration of Wind and Other Intermittent Generation) Rule 2008.

classified generating unit means a *non-scheduled generating unit* or *scheduled generating unit* immediately before the registration date that could be classified as a *semi-scheduled generating unit* immediately after the registration date.

commencement date means the date on which Schedule 2 of the Amending Rule commences operation.

committed project means a project that *NEMMCO* considers has been fully committed by the project proponent taking into account the following factors:

(a) the project proponent's rights to land for the construction of the project;

(b) whether contracts for the supply and construction of the project's major plant or equipment, including contract provisions for project cancellation payments, have been executed;

(c) the status of all planning and construction approvals and licences necessary for the commencement of construction of the project, including completed and approved environmental impact statements;

(d) the level of commitment to financing arrangements for the project; and

(e) whether project construction has commenced or a firm date has been set for it to commence.

initial ECM guidelines has the meaning given in clause 11.10A.8.

potential semi-scheduled generating unit means a *generating unit* that, at the time of registration of that unit under Chapter 2, could have been classified as a *semi-scheduled generating unit* in accordance with clause 2.2.7 and:

(a) is listed in "Table 4.22: Committed NEM Wind Farms" of the 2007 *statement of opportunities*; or

(b) is considered by *NEMMCO* to be a committed project as at 1 January 2008,

and, for the avoidance of doubt, does not include a classified generating unit.

registered generating unit means a *generating unit* which has had its classification as a *semi-scheduled generating unit* approved by *NEMMCO* on or after the registration date and before the commencement date.

registration date means the date on which Schedule 1 of the Amending Rule commences operation.

11.10A.2 Registration and reclassification of classified generating units

(a) On and after the registration date, a *Non-Scheduled Generator* or *Scheduled Generator* with a classified generating unit will not be required to register as a *Semi-Scheduled Generator* and reclassify the classified generating unit as a *semi-scheduled generating unit*.

(b) For a period of 2 years after the commencement date, a *Generator* who:

(1) as at the commencement date has classified generating units; and

(2) subsequently reclassifies those generating units as *semi-scheduled generating units*,

is not required to pay *Participant fees* in accordance with rule 2.11.

(c) Classified generating units that are reclassified as *semi-scheduled generating units* after the registration date but prior to the commencement date are taken to be *non-scheduled generating units* or *scheduled generating units* (as the case may be) until the commencement date.

11.10A.3 Registered generating unit

(a) Subject to paragraph (b) and clause 11.10A.4, until the commencement date, a registered generating unit is taken to be a *non-scheduled generating unit* for the purposes of the *Rules*.

(b) A registered generating unit must meet the technical requirements for a *semi-scheduled generating unit* in schedule 5.2.

(c) A registered generating unit that:

(1) prior to the registration date is classified as a *scheduled generating unit*; and

(2) on or after the registration date but prior to the commencement date is reclassified as a *semi-scheduled generating unit*,

is taken to continue to be a *scheduled generating unit* until the commencement date.

11.10A.4 Classification of potential semi-scheduled generating unit

(a) On and after the registration date, a person may apply to *NEMMCO* to classify a potential semi-scheduled generating unit as:

(1) a *scheduled generating unit* in accordance with clause 2.2.2; or

(2) a *non-scheduled generating unit* in accordance with clause 2.2.3.

(b) *NEMMCO* must treat an application received under paragraph (a) as:

(1) in the case of an application referred to paragraph (a)(1), as an application to be classified as a *scheduled generating unit*; or

(2) in the case of an application referred to in paragraph (a)(2), as an application to be classified as a *non-scheduled generating unit*.

(c) In assessing an application referred to in paragraph (a)(2), *NEMMCO* must approve the classification if *NEMMCO* is satisfied that the output of the *generating unit* is *intermittent* even where the *generating unit* does not meet the requirements of clause 2.2.3(b)(1) or (2).

(d) If an application for classification of a potential semi-scheduled generating unit made under this clause 11.10A.4 is approved by *NEMMCO* in accordance with clause 2.2.2 or, subject to paragraph (c), clause 2.2.3, the relevant unit is taken to be a *scheduled generating unit* or *non-scheduled generating unit* (as the case may be) for the purposes of the *Rules.*

11.10A.5 Participant fees

Until *NEMMCO* determines a structure of *Participant fees* under rule 2.11 which provides for *Semi-Scheduled Generators*, references to *Scheduled Generators* in *NEMMCO's* "Structure of Participant Fees under rule 2.11 of the National Electricity Rules" publication dated 24 March 2006, will be taken to include *Semi-Scheduled Generators*.

11.10A.6 Timetable

(a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule with those amendments to take effect from the commencement date.

(b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required under paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.10A.7 Procedure for contribution factors for ancillary service transactions

(a) *NEMMCO* must amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) in accordance with clause 3.15.6A(m) to take into account the Amending Rule with those amendments to take effect from the commencement date.

(b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the procedure prepared by *NEMMCO* under clause 3.15.6A(k) as required under paragraph (a) are taken to satisfy the equivalent action under clause 3.15.6A(m).

11.10A.8 Guidelines for energy conversion model information

(a) Subject to paragraph (b), for the purposes of clause 2.2.7(d) *NEMMCO* must *publish* guidelines by no later than the registration date setting out the information to be contained in *energy conversion models* (the **initial ECM guidelines**).

(b) The initial ECM guidelines do not need to be prepared in consultation with *Semi-Scheduled Generators*. *NEMMCO* must replace the initial ECM guidelines as soon as reasonably practicable with guidelines described in clause 2.2.7(d) which have been prepared in consultation with *Semi-Scheduled Generators* and such other person that *NEMMCO,* acting reasonably, considers appropriate.

11.11 Rules consequent on making of the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007

11.11.1 Definitions

For the purposes of this rule 11.11:

Amending Rule means the National Electricity Amendment (Cost Recovery of Localised Regulation Services) Rule 2007.

commencement date means 1 January 2009.

11.11.2 Action taken by NEMMCO for the purposes of Amending Rule

(a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the procedure prepared by *NEMMCO* under clause 3.15.6A(k) for the purpose of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.

(b) Any action taken by *NEMMCO* prior to the commencement date to calculate the *local market ancillary service requirement* to include *regulation services* for the purposes of the Amending Rule is taken to have satisfied the equivalent action under the *Rules*.

11.12 Rules consequent on making of the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007

11.12.1 Definitions

For the purposes of this rule 11.12:

Amending Rule means the National Electricity Amendment (Efficient Dispatch of Regulation Services) Rule 2007.

commencement date means 1 January 2009.

11.12.2 Action taken by NEMMCO for the purposes of Amending Rule

(a) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the *market ancillary service specification* as a result of the Amending Rule is taken to satisfy the equivalent actions required for revising a *market ancillary service specification* under the *Rules*.

(b) Any action taken by *NEMMCO* prior to the commencement date for the purpose of revising the procedures established under clause 3.8.1(c) to allow relaxation of *power system constraints* as a result of the Amending Rule, is taken to satisfy any equivalent actions required under the *Rules*.

(c) Any action taken by *NEMMCO* prior to the commencement date for the purpose of amending the methodology developed by *NEMMCO* to determine *dispatch prices* and *ancillary service prices* under clause 3.9.3(b) as a result of the Amending Rule is taken to satisfy the equivalent actions required under the *Rules*.

Part L Abolition of Snowy Region (2007 amendments)

11.13 Rules consequent on making the National Electricity Amendment (Abolition of Snowy Region) Rule 2007

11.13.1 Definitions

In this rule 11.13:

***Amending Rule* 2007** means the National Electricity Amendment (Abolition of Snowy Region) Rule 2007.

current *Regions Publication* means the document published by *NEMMCO* entitled "List of Regional Boundaries and Marginal Loss Factors for the 2007/08 Financial Year".

Draft Determination date means 25 January 2007.

implementation period means the period specified in clause 11.13.4.

implementation plan means the plan referred to in clause 11.13.5.

implementation function means a function referred to in clause 11.13.6.

Loss Factors Publication means the document *published* by *NEMMCO* from time to time under clauses 3.6.1(f) and 3.6.2(f1) which sets out *marginal loss factors*.

modified *regions* means the *regions* identified as the New South Wales *region* and the Victoria *region* in the current *Regions Publication*, modified as a result of the abolition of the Snowy *region* under the *Amending Rule* 2007 taking effect.

new *regions* means the unmodified *regions* and the modified *regions*.

New South Wales *region*, **Snowy *region*** and **Victoria *region*** each have the same meaning as in clause 3.5.6.

old *regions* means the *regions* identified in the current *Regions Publication*.

Rule commencement date means the date on which the *Amending Rule* 2007 commences operation.

unmodified regions means the *regions* known as the Queensland *region*, the South Australia *region* and the Tasmania *region* as identified in the current *Regions Publication*, the boundaries of which are not affected by the abolition of the Snowy *region* under the *Amending Rule* 2007.

11.13.2 Purpose of rule 11.13

The purpose of this rule 11.13 is to enable the efficient and effective implementation of a change of *region* boundaries as a result of the abolition of the Snowy *region* during the implementation period, prior to the start of the new *regions*, and to support a smooth transition from the old *regions* to the new *regions*.

11.13.3 Application of rule 11.13

This rule 11.13 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*), and to the extent of any inconsistency, this rule 11.13 prevails during the implementation period.

11.13.4 Implementation period

(a) The implementation period starts on the Rule commencement date and ends on 15 July 2008.

(b) Any decision made or action taken by *NEMMCO* for the purpose of implementing the abolition of the Snowy *region* between the Draft Determination date and the Rule commencement date, has continuing effect as if the decision had been made or the action had been taken under the *Rules* as amended by the *Amending Rule* 2007.

11.13.5 Publishing of implementation plan by NEMMCO

(a) *NEMMCO* must develop and *publish* by 15 September 2007 an implementation plan that identifies the key implementation steps to be taken during the implementation period, including the proposed exercise by *NEMMCO* of the implementation functions.

(b) *NEMMCO* may, during the implementation period, amend the implementation plan as necessary, and must *publish* the amended plan.

11.13.6 NEMMCO implementation functions

(a) Subject to this rule 11.13, *NEMMCO* has, during the implementation period, the following functions and powers ('the implementation functions'):

(1) the power to make a decision or take any action (including the power to refrain from making a decision or taking action) that is necessary or consequential to the implementation of the *Amending Rule* 2007; and

(2) the other functions and powers specified under this rule 11.13.

(b) The exercise of the implementation functions by *NEMMCO* must be referable to and consistent with the implementation plan as *published*.

11.13.7 Software modifications to implement abolition of Snowy region

Despite clause 3.17.1 and subject to this clause 11.13.7, *NEMMCO*:

(1) may, as an implementation function, alter, reconfigure, reprogram or otherwise modify or enhance any computer software required for the operation of the *market*; and

(2) must, to the extent practicable, adhere to the procedures for change management under the document entitled "NEM Systems IT Procedure Manual: Change Management" and *NEMMCO* may make the changes under paragraph (1) without authorisation by the *AER* even if *NEMMCO* does not fully adhere to that document.

11.13.8 Allocation of transmission connection points as a result of abolition of Snowy region

Each *transmission network connection point* previously assigned to the Snowy *region* as at the Rule commencement date is allocated to the New South Wales *region* and the Victoria *region* as follows:

Loads

Location	Voltage kV	TNI code	Region
Khancoban	330	NKHN	Victoria

Generation

Location	Voltage kV	Connection point ID	TNI code	Region
Jindabyne pump at Guthega	132	NGJP	NGJP	Victoria
Guthega	132	NGUT	NGUT	NSW
Guthega Ancillary Services 2	132	NGUT2	NGUT	NSW
Guthega	132	NGUT8	NGUT	NSW
Lower Tumut	330	NLTS	NLTS	NSW
Lower Tumut Ancillary Services 2 (pumps)	330	NLTS3	NLTS	NSW
Lower Tumut Ancillary Services 3	330	NLTS5	NLTS	NSW
Lower Tumut	330	NLTS8	NLTS	NSW

Location	Voltage kV	Connection point ID	TNI code	Region
Murray Ancillary Services 1	330	NMUR11	NMUR	Victoria
Murray Ancillary Services 2	330	NMUR13	NMUR	Victoria
Murray Ancillary Services 3	330	NMUR5	NMUR	Victoria
Murray Ancillary Services 4	330	NMUR7	NMUR	Victoria
Murray	330	NMUR8	NMUR	Victoria
Murray Ancillary Services 5	330	NMUR9	NMUR	Victoria
Upper Tumut	330	NUTS	NUTS	NSW
Upper Tumut Ancillary Services 2	330	NUTS3	NUTS	NSW
Upper Tumut Ancillary Services 3	330	NUTS5	NUTS	NSW
Upper Tumut Ancillary Services 4	330	NUTS7	NUTS	NSW
Upper Tumut	330	NUTS8	NUTS	NSW

11.13.9 Location of region boundaries

The location of the *region* boundary between the New South Wales region and the Victoria *region* as a result of the abolition of the Snowy *region* is as follows:

(1) at Red Cliffs Terminal Station on the 0X1 Red Cliffs to Buronga 220 Transmission Line;

(2) at Wodonga Terminal Station on the 060 Wodonga to Jindera 330 Transmission Line;

(3) at Murray Switching Station on the 066 Murray to Lower Tumut 330 Transmission Line;

(4) at Murray Switching Station on the 065 Murray to Upper Tumut 330 Transmission Line;

(5) at the Guthega 132kV Switchyard 132kV Bus No 2-3 bus Section Disconnector 4128.

11.13.10 2008/09 Regions Publication and Loss Factors Publication

(a) *NEMMCO* must, as an implementation function, review and *publish* by 1 April 2008:

(1) the 2008/09 *Regions Publication*; and

(2) the 2008/09 Loss Factors Publication,

making any changes necessary in accordance with the *Amending Rule* 2007, including but not limited to the allocation of *transmission network connection points* under clause 11.13.8 and the location of *region* boundaries under clause 11.13.9.

(b) In relation to the publications referred to in paragraph (a) (or subsequent annual *Regions Publications* or Loss Factors Publications), nothing prevents *NEMMCO*:

(1) amending those publications to implement:

(i) the *Amending Rule* 2007 or future *region* boundary changes under the *Rules*;

(ii) future physical changes to the *transmission network*;or

(iii) changes in the configuration of *connection points* requested by *Registered Participants* for the purposes of participation in the *NEM*; or

(2) publishing the annual *Regions Publication* and the Loss Factors Publication in a single document.

11.13.11 Reserve margin calculations

NEMMCO may, as an implementation function, determine estimates of the minimum reserve levels to be applied to the modified *regions* provided that the process used to determine the estimates is *published*.

11.13.12 Re-calculation of network constraints and transmission loss factors

(a) A *Transmission Network Service Provider* must, to the extent practicable, provide to *NEMMCO* on request information for or with respect to the re-calculation of *network constraints* and *transmission loss factors* including but not limited to:

(1) advice on the re-calculation of *network* limits, including stability limits; and

(2) information relating to the determination of *network losses* and *loss factors*.

(b) Where a *Transmission Network Service Provider* advises *NEMMCO* that it is not practicable to provide information relating to the re-calculation of *network* limits or losses within the time period specified in the request, *NEMMCO* may:

(1) request the *Transmission Network Service Provider* to provide the information to *NEMMCO* as it becomes available to the provider;

(2) determine *inter-regional loss factors* on the basis of estimates;

(3) apportion losses for the purpose of *settlements residue payments* using estimates; or

(4) re-formulate existing *network constraints* to apply to the new *regions* using estimates.

(c) *NEMMCO* must *publish* the process used for determining estimates under paragraph (b).

11.13.13 Transition of settlements residue auction arrangements

(a) Terms used in this clause 11.13.13 that are used in the *auction rules* have the same meaning as in those rules.

(b) Despite anything in rule 3.18, *NEMMCO*:

(1) may, as an implementation function:

(i) amend the *auction rules*;

(ii) remove or modify Unit Categories affected by the abolition of the Snowy *region* and the consequential modification of the New South Wales *region* and the Victoria *region*;

(iii) re-set *auction expense fees* as required to align with any new Unit Categories;

(iv) conduct *auctions* in relation to new Unit Categories; and

(v) take any other action in relation to *auctions* that is necessary or consequential on the abolition of the Snowy *region*; and

(2) must consult with the *Settlements Residue Committee* in amending the *auction rules* under paragraph (1) and is only required to comply with the *Rules consultation procedures* to the extent practicable in the

circumstances of the implementation of the abolition of the Snowy *region*.

11.13.14 Continuity of regions

Subject to this rule 11.13 and clause 3.5.6, on and from 00:00 hours *EST* on 1 July 2008:

(1) the unmodified *regions* continue and are taken to be *regions* for all purposes under the *Rules*; and

(2) the New South Wales *region* and the Victoria *region* as modified by the *Amending Rule* 2007 continue and are taken to be *regions* specified under clause 3.5.1 for all purposes under the *Rules.*

Part M Economic Regulation of Distribution Services (2007 amendments)

Division 1 General Provisions

11.14 General provisions

11.14.1 Application of this Division

This Division has no application in relation to Victoria.

11.14.2 Definitions

amending rules means the *National Electricity (Economic Regulation of Distribution Services) Amendment Rules 2007*.

current Chapter 6 means Chapter 6 of these *Rules* as currently in force.

former Chapter 6 means Chapter 6 of these *Rules* as in force before the substitution of the *current Chapter 6* by the amending rules.

jurisdictional pricing determination for a *participating jurisdiction* means a determination regulating *distribution service* pricing made by the *Jurisdictional Regulator* for the *participating jurisdiction* and in force immediately before the date of the relevant amendment.

new regulatory provisions means the provisions of *current Chapter 6* or (if applicable) of later Divisions of this Part providing for the economic regulation of *distribution services* after the transitional regulatory period comes to an end.

old regulatory regime for a *participating jurisdiction* includes:

(a) the jurisdictional pricing determination for the *participating jurisdiction*; and

(b) the laws (including the *former Chapter 6*) governing the making, monitoring, administration and enforcement of the jurisdictional pricing determination;

(c) any other determination, guideline, code or document (whatever its description) of a kind contemplated by the *former Chapter 6* that was made for the *participating jurisdiction* by the relevant *Jurisdictional Regulator* and was in force immediately before the date of the relevant amendment;

(d) any other obligation imposed by or under the *former* Chapter 6;

(e) any power or function of the *Jurisdictional Regulator* under the former Chapter 6.

new regulatory regime means the system for the economic regulation of *distribution services* contemplated by the new regulatory provisions.

relevant amendment means the substitution of the current Chapter 6 for the former Chapter 6 by the amending rules.

transitional regulatory period for a *participating jurisdiction* means the *regulatory control period* for which the *jurisdictional pricing determination* for the relevant *participating jurisdiction* was made.

11.14.3 Preservation of old regulatory regime

(a) Subject to this Part, a *Distribution Network Service Provider* who was providing *distribution services* in a *participating jurisdiction* at the date of the relevant amendment

(1) remains subject to the old regulatory regime for the duration of the transitional regulatory period; and

(2) does not become subject to the new regulatory regime until the end of the transitional regulatory period.

Examples:

1. Reporting, monitoring and other compliance requirements continue under the old regulatory regime until the end of the transitional regulatory period and (subject to this Part) are unaffected by the new regulatory provisions.

2. *Price regulation continues under the old regulatory regime until the end of the transitional regulatory period and is unaffected by the new regulatory provisions.*

3. *Prudential, billing and settlement issues are governed by rules 6.7 and 6.8 of former Chapter 6 and any applicable regulatory instruments (rather than Parts J and K of current Chapter 6).*

4. *Access disputes are dealt with under the old regulatory regime (and cannot be notified under Part L of current Chapter 6).*

(b) However:

(1) the new regulatory provisions govern the making of a distribution determination for the *Distribution Network Service Provider* at the end of the transitional regulatory period; and

(2) in that respect the *new regulatory provisions* apply to a *Distribution Network Service Provider* who is still subject to the old regulatory regime as if the jurisdictional pricing determination were a distribution determination approaching the end of its *regulatory control period*.

11.14.4 Transfer of regulatory responsibility

(a) The Minister for a *participating jurisdiction* may, during the course of the transitional regulatory period, transfer responsibility for the economic regulation of *distribution services* in the relevant jurisdiction from the *Jurisdictional Regulator* to the *AER*.

(b) A Minister for a *participating jurisdiction* makes (or is taken to make) a transfer of regulatory responsibility under this clause:

(1) by giving notice of the transfer to the *Jurisdictional Regulator* and the *AER*; or

(2) if powers exist apart from this clause under the law of the *participating jurisdiction* to transfer regulatory responsibility from the *Jurisdictional Regulator* to the *AER* – by exercising those powers.

(c) If the Minister makes a transfer of regulatory responsibility under this clause:

(1) the *AER* is subrogated to the position of the *Jurisdictional Regulator*; and

(2) the *AER* may therefore exercise powers and functions of the *Jurisdictional Regulator* (including legislative powers and functions) under the old regulatory regime; and

Note:

The AER may also use its powers (e.g. for information gathering) under the Law.

(3) references to the *Jurisdictional Regulator* in a determination or other instrument (including a legislative instrument) related to the old regulatory regime will be read as references to the *AER*.

11.14.5 Special requirements with regard to ring fencing

(a) The requirements of the old regulatory regime with regard to ring fencing (rule 6.12 of *former Chapter 6* and related guidelines) apply to a *Distribution Network Service Provider* until the *AER* assumes regulatory responsibility at the end of the transitional regulatory period or on the earlier transfer of regulatory responsibility to the *AER*.

(b) On the *AER*'s assumption of regulatory responsibility, a *Distribution Network Service Provider*:

(1) ceases to be subject to the requirements of the old regulatory regime with regard to ring fencing; and

(2) becomes subject to the ring fencing requirements of the new regulatory regime; but

(3) guidelines in force for a *participating jurisdiction* immediately before the *AER's* assumption of regulatory responsibility (**transitional guidelines)** continue in force for that jurisdiction subject to amendment, revocation or replacement by guidelines made under the new regulatory regime.

(c) The transitional guidelines:

(1) are taken to be guidelines made by the *AER* under the new regulatory regime; and

(2) are to be construed as if references to a *Jurisdictional Regulator* were references to the *AER*.

(d) A waiver granted, or additional ring fencing requirement imposed, by a *Jurisdictional Regulator* under the transitional guidelines continues in force under the transitional guidelines subject to variation or revocation by the *AER*.

11.14.6 Additional requirements with regard to cost allocation

(a) Even though a *Distribution Network Service Provider* remains subject to the old regulatory regime, the provider is also subject, as from the date of the relevant amendment, to the requirements of Part F of the current Chapter 6 (Cost Allocation).

(b) This clause applies only for the purposes of the next distribution determination for the *Distribution Network Service Provider*.

11.14.7 Construction of documents

To facilitate the transition from the old regulatory regime to the new regulatory regime, references in determinations and other documents to provisions of former Chapter 6 are to be read (where the context admits) to corresponding provisions of the current Chapter 6.

Division 2 Special provisions applying to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014

11.15 Special provisions applying to New South Wales and the Australian Capital Territory

11.15.1 Regulatory control period 2009-2014 for NSW and ACT

There is to be a regulatory control period of 5 years for the NSW and ACT Distribution Network Service Providers commencing on 1 July 2009, which is referred to in this Division 2 as the regulatory control period 2009-2014.

11.15.2 Application of Chapter 6 to NSW and ACT for regulatory control period 2009-2014

(a) Chapter 6 of the *Rules* applies in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 as if that Chapter were amended so as to be in the form set out in Appendix 1 to the *Rules*.

(b) However, anything required to be done by or in relation to the NSW and ACT Distribution Network Service Providers during the regulatory control period 2009-2014 for the purposes of the *regulatory control period* commencing on 1 July 2014 is to be done in accordance with general Chapter 6, but (where appropriate) taking into account anything done under transitional Chapter 6.

(c) Accordingly general Chapter 6 does not apply in relation to the NSW and ACT Distribution Network Service Providers in respect of the regulatory control period 2009-2014 except:

(1) as provided by paragraphs (a) and (b); and

(2) to the extent that a provision of transitional Chapter 6 expressly applies a provision of general Chapter 6 or expressly provides that an act, matter or thing has to be done in accordance with a provision of or a procedure in general Chapter 6.

(d) For the avoidance of doubt, this rule 11.15 and transitional Chapter 6 do not apply to *Distribution Network Service Providers* not referred to in paragraph (c).

(e) References in the *Rules* (other than Chapter 6 and this rule 11.15) to Chapter 6 or a provision of Chapter 6 are references to transitional Chapter 6 or a provision of transitional Chapter 6 so far as the references relate to the regulatory control period 2009-2014 for the NSW and ACT Distribution Network Service Providers.

(f) In this rule 11.15:

"general Chapter 6" means Chapter 6 as in force apart from this rule 11.15.

"transitional Chapter 6" means Chapter 6 in the form set out in Appendix 1 to the Rules.

Division 3 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers

11.16 Transitional arrangements for first distribution determination for Queensland Distribution Network Service Providers

11.16.1 Definitions

In this Division 3:

2005 determination means the Final Determination: Regulation of Electricity Distribution of the Queensland Competition Authority dated April 2005.

EDSD Review means the review by the Independent Panel appointed by the Queensland Government into Electricity Distribution and Service Delivery for the 21st Century which was established in March 2004 and reported in July 2004.

ENERGEX means Energex Limited A.C.N 078 849 055 and any successor business.

Ergon Energy means Ergon Energy Corporation Limited A.C.N. 087 646 062 and any successor business.

Queensland Competition Authority means the authority established by section 7 of the *Queensland Competition Authority Act 1997* (Qld).

regulatory control period means the *regulatory control period* beginning 1 July 2010.

11.16.2 Application of Part to Queensland 2010 distribution determinations

The requirements of this Division 3 apply for the purposes of making a distribution determination for ENERGEX and Ergon Energy for the regulatory control period and modify the application of Chapter 6 of the Rules to the extent set out in this Division 3.

11.16.3 Treatment of the regulatory asset base

(a) Nothing in Chapter 6 of the *Rules* requires ENERGEX or Ergon Energy to amend the approach allowed in the 2005 determination in relation to the treatment of *standard control services* and other services in the regulatory asset base for the regulatory control period.

(b) The *AER* must accept the approach proposed by ENERGEX and Ergon Energy for the regulatory control period if it is consistent with the approach in the 2005 determination.

(c) The *AER* must provide for any necessary adjustments or mechanisms in the *distribution determination* for the regulatory control period to prevent any cross-subsidies between *standard control services* and other *distribution services*.

Note:

The regulatory asset bases for Ergon Energy and ENERGEX are likely to include assets used to provide services which are not standard control services and accordingly the expected revenue for each year will need to be adjusted to avoid double recovery of those costs.

11.16.4 Efficiency Benefit Sharing Scheme

(a) An *efficiency benefit sharing scheme* for ENERGEX and Ergon Energy for the regulatory control period must not cover efficiency gains and losses relating to capital expenditure.

(b) For the purposes of clause 6.5.8(c) the *AER* must also have regard to the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government.

11.16.5 Service Target Performance Incentive Scheme

In formulating a *service target performance incentive scheme* to apply to ENERGEX and Ergon Energy for the regulatory control period, the *AER*, in addition to the requirements in clause 6.6.2(b), must also:

(1) take into account the continuing obligations on ENERGEX and Ergon Energy throughout the regulatory control period to implement the recommendations from the EDSD Review adopted by the Queensland Government;

(2) take into account the impact of severe weather events on service performance; and

(3) consider whether the scheme should be applied by way of a paper trial or whether a lower powered incentive is appropriate.

11.16.6 Framework and approach

(a) If either ENERGEX or Ergon Energy submits a proposal to the *AER* as to the classification of services and control mechanism for the regulatory control period on or before 31 March 2008, the *AER* must publish its *framework and approach paper* under clause 6.8.1 in relation to those issues within five months of receiving the proposal from ENERGEX or Ergon Energy (as the case may be).

(b) This clause does not affect the timing or the processes of the *AER* in preparing and publishing its *framework and approach paper* on the remaining issues in clause 6.8.1 for ENERGEX or Ergon Energy if they submit a proposal under paragraph (a).

11.16.7 Regulatory Proposal

(a) For the purposes of submitting a *regulatory proposal* under clause 6.8.2 for the regulatory control period, ENERGEX and Ergon Energy may, for the purposes of calculating indicative prices referred to in clause 6.8.2(c)(4) and including X factors for the purposes of clause 6.5.9, treat the proposed *statement of regulatory intent* published under clause 6.16(b)(1) as if it were the applicable *statement of regulatory intent.*

(b) If the *statement of regulatory intent* differs materially from the proposed *statement of regulatory intent,* ENERGEX or Ergon Energy may revise its calculation of indicative prices and proposed X factors in its *regulatory proposal* on or before 1 July 2009.

(c) The *AER* must *publish* any revised information submitted by ENERGEX or Ergon Energy under this clause.

11.16.8 Side constraints

For the regulatory control period, nothing in clause 6.18.6 should preclude the implementation of any price paths approved by the Queensland Competition Authority (including any necessary adjustment of those price paths in light of the expected revenue for the first *regulatory year* of the regulatory control period).

11.16.9 Cost pass throughs

(a) If an event or circumstance occurs before 1 July 2010 which would constitute a pass through under the 2005 determination and no application for a pass through has been made in relation to that event or circumstance, ENERGEX or Ergon Energy may apply to the *AER* within a year of the event or circumstance occurring to accommodate the impact of the event in the regulatory control period.

(b) The *AER* must allow a pass through of such amounts if the event or circumstance would have constituted a pass through under the 2005 determination as if the amounts were *approved pass through amounts* under clause 6.6.1.

11.16.10 Capital Contributions Policy

(a) ENERGEX and Ergon Energy must comply with a capital contributions policy published under this clause 11.16.10 for the regulatory control period.

(b) By 1 July 2009, ENERGEX and Ergon Energy must publish on their website a capital contributions policy based upon the requirements relating to capital contributions in their Network Pricing Principles Statements approved by the Queensland Competition Authority immediately in force prior to 1 July 2009.

(c) The *AER* may by written notice, before 1 January 2010, direct ENERGEX or Ergon Energy to revise and republish their capital contributions policy within 15 *business days* of the notice only if the published policy does not give effect to the requirements relating to capital contributions in their Network Pricing Principles Statement.

(d) After 1 January 2010, ENERGEX or Ergon Energy may apply to the *AER* to amend their published capital contributions policy and the *AER* may, after such consultation as it considers appropriate, approve or not approve that amendment.

Division 4 – Transitional provisions of specific application to Victoria

11.17 Transitional provisions of specific application to Victoria

11.17.1 Definitions

In this Division:

AMI Order in Council means the Order in Council made by the Governor of Victoria under section 15A and section 46D of the *Electricity Industry Act 2000* (Vic) and published in the Victoria Government Gazette on 28 August 2007 (and includes that Order in Council as amended from time to time).

ESC cost allocation guidelines means *Electricity Industry Guideline No.3, Regulatory Information Requirements* made by the ESC and dated 14 December 2006 (and includes those guidelines as amended from time to time).

ESC distribution pricing determination means the Victorian distribution pricing determination as defined in section 3(1) of the *National Electricity (Victoria) Act 2005*.

Victorian Distribution Network Service Provider means a *Distribution Network Service Provider* for a *distribution network* situated wholly or partly in Victoria.

11.17.2 Calculation of estimated cost of corporate income tax

(a) This clause applies to the calculation of the estimated cost of corporate income tax for the purposes of distribution determinations that are to take effect on 1 January 2011 for Victorian Distribution Network Service Providers.

(b) For calculating the estimated cost of corporate income tax, the *AER* must adopt:

(1) the taxation values of assets carried over from the ESC distribution pricing determination; and

(2) the classification of assets, and the method of classification, adopted for the ESC distribution pricing determination; and

(3) the same method of depreciation as was adopted by the ESC for the ESC distribution pricing determination.

(c) The *AER* may, however, depart from methods of asset classification or depreciation mentioned in paragraph (b)(2) or (3) to the extent required by changes in the taxation laws or rulings given by the Australian Taxation office.

(d) A *post-tax revenue model* must be consistent with this clause.

11.17.3 Decisions made in the absence of a statement of regulatory intent

(a) This clause applies if a Victorian Distribution Network Service Provider submits a *building block proposal* before the *AER* issues a *statement of regulatory intent*.

(b) In deciding questions to which the considerations stated in clause 6.5.4(e) are relevant, the *AER* must have regard to those considerations.

11.17.4 Cost allocation guidelines

(a) In formulating the *Cost Allocation Guidelines* under clause 6.15.3, the *AER* must include guidelines specifically applicable to Victorian Distribution Network Service Providers (the ***guidelines of specific application to Victoria***).

(b) The guidelines of specific application to Victoria:

(1) must be formulated with regard to the ESC cost allocation guidelines; and

(2) must be designed to ensure, to the maximum practicable extent, consistency between cost allocation as required by the ESC distribution pricing determination and cost allocation in later *regulatory control periods*.

11.17.5 Modification of requirements related to cost allocation method

(a) Clause 6.15.4(a) applies to a Victorian Distribution Network Service Provider as if, instead of requiring submission of the provider's proposed *Cost Allocation Method* within 12 months after the commencement of Chapter 6, it required submission of the proposed *Cost Allocation Method* together with the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6.

(b) The references in clauses 6.5.6(b)(2) and 6.5.7(b)(2) to the *Cost Allocation Method* are, if paragraph (a) is applicable, to be read as references to the proposed *Cost Allocation Method* submitted with the *building block proposal*.

(c) The *AER* must include in its *framework and approach paper* prepared for a Victorian *Distribution Network Service Provider*, in relation to the first *building block proposal* to be submitted by the provider after the commencement of Chapter 6, a statement of its likely approach to cost allocation based on the guidelines then in force.

(d) The *AER*:

(1) must, in deciding under clause 6.15.4(c) whether to approve a *Cost Allocation Method* submitted by a Victorian Distribution Network Service Provider, have regard to previous cost allocation in accordance with the ESC distribution pricing determination; and

(2) must not approve the *Cost Allocation Method* unless it allows effective comparison of historical and forecast cost allocation between the period to which the ESC distribution pricing determination applies and later *regulatory control periods*; and

(3) may, subject to the relevant *Cost Allocation Guidelines*, refuse to approve the *Cost Allocation Method* if it differs from the method previously used by the Victorian Distribution Network Service Provider.

11.17.6 AMI Order in Council

(a) Metering services that are regulated under the AMI Order in Council are not, while so regulated, subject to regulation under a distribution determination but, on cessation of regulation under the AMI Order in Council, are liable to regulation under a distribution determination.

(b) However, for a relevant *regulatory control period*, services to which exit fees under clause 7, or restoration fees under clause 8, of the AMI Order in Council applied are to be classified as alternative control services and are to be regulated by the *AER* on the same basis as applied under the AMI Order in Council.

(c) For paragraph (b), a relevant *regulatory control period* is a *regulatory control period* commencing on or after 1 January 2016 and before 1 January 2021.

(d) Until there is a transfer of regulatory responsibility from the *ESC* to the *AER* under a law of Victoria, clause 7.3.6(f) in its application to Victoria will be read as if it permitted the recovery of the costs to which it refers in accordance with a determination made either by the *AER* or by the *ESC*.

(e) This clause expires on 1 January 2021.

Part N Registration of Foreign Based Persons and Corporations as Trader Class Participants (2007 amendments)

11.18 Rules consequential on the making of the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007

11.18.1 Definitions

For the purposes of this rule 11.18:

Amending Rule means the National Electricity Amendment (Registration of Foreign Based Persons and Corporations as Trader Class Participants) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

11.18.2 Auction rules

(a) *NEMMCO* must amend the *auction rules* by 1 September 2008 in accordance with clause 3.18.3 to incorporate the amendments to the *Rules* made by the Amending Rule.

(b) Any action taken by *NEMMCO* prior to the commencement date, in anticipation of the commencement date, to amend the *auction rules* for the purpose of the Amending Rule is taken to satisfy the equivalent action under clause 3.18.3.

Part O Process for Region Change (2007 amendments)

11.19 Rules consequent on making of the National Electricity Amendment (Process for Region Change) Rule 2007

11.19.1 Definitions

Amending Rule means the National Electricity Amendment (Process for Region Change) Rule 2007.

commencement date means the day on which the Amending Rule commences operation.

old clause 3.5.5 means clause 3.5.5 of the *Rules* as in force immediately before the commencement date.

11.19.2 Regions Publication

The Regions Publication published by *NEMMCO* immediately before the commencement date in accordance with old clause 3.5.5 and clause 11.13.10 is taken to be the *Regions Publication published* by *NEMMCO* in accordance with clause 2A.1.3.

Part P Integration of NEM Metrology Requirements

11.20 Rules consequential on the making of the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008

11.20.1 Definitions

For the purposes of this rule 11.20:

Amending Rule means the National Electricity Amendment (Integration of NEM Metrology Requirements) Rule 2008.

commencement date means the day on which the Amending Rule commences operation.

first-tier jurisdictional requirements publication means the publication published by *NEMMCO* in accordance with clause 11.20.6.

Minimalist Transitioning Approach has the same meaning as in the Queensland Electricity Industry Code.

new clause 7.3.1 means clause 7.3.1 of the *Rules* immediately after the commencement date.

Victorian *first-tier load* means a load in Victoria where the electricity flowing through the *connection point* is equal to, or greater than, 160 MWh per annum.

11.20.2 Metering installations for non-market generating units immediately prior to 30 June 2008

(a) A *metering installation* for a *non-market generating unit* that was installed immediately prior to 30 June 2008 and complied with the applicable jurisdictional requirements for that installation on 30 June 2008 is taken to satisfy the requirements for *metering installations* for *non-market generating units* in new clause 7.3.1.

(b) Where a *metering installation* for a *non-market generating unit* did not comply with the requirements referred to in paragraph (a), that installation

must be repaired or replaced in accordance with the requirements of new clause 7.3.1.

(c) The applicable jurisdictional requirements for *metering installations* for *non-market generating units* referred to in paragraph (a) must be referred to in the first-tier jurisdictional requirements publication.

11.20.3 First-tier load metering installations

(a) Subject to clause 11.20.5, a *first-tier load metering installation* as at 30 June 2008 that complied with the applicable jurisdictional requirements for that installation as at that date is taken to comply with the *Rules* provided the *metering installation* continues to comply with the applicable jurisdictional requirements as at 30 June 2008.

(b) A *first-tier load metering installation* that does not satisfy the requirements of paragraph (a) must be repaired or replaced in accordance with the *Rules*.

(c) The applicable jurisdictional requirements referred to in paragraph (a) for *first-tier load metering installations* must be referred to in the first-tier jurisdictional requirements publication.

11.20.4 First-tier load metering installations in Victoria

(a) Subject to paragraph (b) and despite the *Rules*, a *Market Participant* who is responsible for a Victorian *first-tier load* with a type 5 or type 6 *metering installation* immediately before the commencement date is taken to be the *responsible person* for that *metering installation*.

(b) A *Market Participant* who is taken to be the *responsible person* for the *metering installation* referred to in paragraph (a) must ensure the *metering installation* meets the applicable jurisdictional requirements for that installation as referred to in the first-tier jurisdictional requirements publication in accordance with clause 11.20.3(c).

11.20.5 Minimalist Transitioning Approach in Queensland

For the duration of the Minimalist Transitioning Approach, clauses 7.2.3(i)(2), 7.2.5(b)(2), 7.2.5(d)(6) and 7.3.1(f) of the *Rules* do not apply in respect of a *metering installation* which:

(a) is the responsibility of a *Market Participant* or *responsible person* who is operating under the Minimalist Transitioning Approach in Queensland; and

(b) in accordance with the *Market Settlement and Transfer Solution Procedures*:

(1) has a *NMI* classification of SMALL; and

(2) the *Local Network Service Provider* has not received a valid request from a *Market Customer* for the *NMI* to be registered with *NEMMCO*.

11.20.6 First-tier jurisdictional requirements publication

(a) *NEMMCO* must, in consultation with the *participating jurisdictions*, *publish* a document ('**first-tier jurisdictional requirements publication**') that lists the documents that contain the applicable jurisdictional requirements referred to in clauses 11.20.2, 11.20.3 and 11.20.4.

(b) *NEMMCO* must *publish* the first-tier jurisdictional requirements publication by 30 June 2008.

11.20.7 Metrology procedure

(a) *NEMMCO* must make the required amendments to the *metrology procedure* as a result of the Amending Rule by 31 July 2008.

(b) All actions taken by *NEMMCO* prior to the commencement date to amend the *metrology procedure* in accordance with paragraph (a) are deemed to be valid as at the commencement date to the extent that those actions were taken in accordance with the relevant requirements of rule 7.14 (as though the Amending Rule was in force at the time that the action was taken).

(c) The *metrology procedure* published in accordance with rule 7.14 immediately before the commencement date continues to apply as if the Amending Rule had not been made and until *NEMMCO publishes* the amended the *metrology procedure* in accordance with paragraph (a).

11.21 Rules consequential on the making of the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6

11.21.1 Definitions

In this rule 11.21:

Amending Rule means the National Electricity Amendment (NEM Reliability Settings: Information Safety Net and Directions) Rule 2008 No. 6.

Commencement date means the date the Amending Rule commences operation.

11.21.2 EAAP guidelines

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and publishing the first

EAAP guidelines as required by clause 3.7C(p) are taken to satisfy the equivalent actions required for *EAAP guidelines* under rule 3.7C.

11.21.3 NEMMCO procedures for exercising RERT

(a) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of developing and publishing the procedures for the exercise of the *RERT* as required by clause 3.20.7(e) are taken to satisfy the equivalent actions required for the procedures under clause 3.20.7.

(b) *NEMMCO* may develop, *publish*, and may amend from time to time, interim procedures for the exercise of the *RERT* under rule 3.20 at any time before it *publishes* the first procedures for that purpose as required by clause 3.20.7(e). For these purposes:

(1) *NEMMCO* is not required to develop, *publish* or amend those interim procedures in accordance with the *Rules consultation procedures*;

(2) those interim procedures must take into account the *RERT principles* and *RERT guidelines* or, if there are no *RERT guidelines* in existence at that time, the draft guidelines referred to in clause 11.21.4(b);

(3) those interim procedures must include measures as referred to in clause 3.20.7(e);

(4) those interim procedures will cease to apply when *NEMMCO publishes* the first procedures for the exercise of the *RERT* as required by clause 3.20.7(g); and

(5) for so long as those interim procedures apply, references in rule 3.20 to the procedures referred to in clause 3.20.7(e) are taken to include references to those interim procedures.

11.21.4 RERT guidelines

(a) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first *RERT guidelines* as required by clause 3.20.8(c) are taken to satisfy the equivalent actions required for *RERT guidelines* under clause 3.20.8.

(b) If it exercises the *RERT* under rule 3.20 prior to the *publication* of the first *RERT guidelines* as required by clause 3.20.8(c), *NEMMCO* must take into account the draft guidelines set out in Appendix C.3 to the document entitled 'Comprehensive Reliability Review: Second Interim Report' issued by the *Reliability Panel* and dated August 2007.

11.21.5 Timetable

(a) *NEMMCO* must amend the *timetable* in accordance with clause 3.4.3(b) to take into account the Amending Rule and those amendments are to take effect from the commencement date.

(b) All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date to amend the *timetable* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 3.4.3(b).

11.21.6 Power system security and reliability standards

(a) The *Reliability Panel* must amend the *power system security and reliability standards* in accordance with clause 8.8.3 to take into account the Amending Rule and those amendments are to take effect from the commencement date.

(b) All actions taken by the *Reliability Panel* prior to the commencement date in anticipation of the commencement date to amend the *power system security and reliability standards* as required by paragraph (a) are taken to satisfy the equivalent action required under clause 8.8.3.

11.21.7 Report on statement of opportunities

All actions taken by *NEMMCO* prior to the commencement date in anticipation of the commencement date for the purposes of preparing and providing a report to the *Reliability Panel* as required by clause 3.13.3(u) are taken to satisfy the equivalent actions required for preparing and providing a report under clause 3.13.3(u).

11.21.8 Methodology for dispatch prices and ancillary services prices

Minor or administrative amendments made by *NEMMCO* to the methodology for determining *dispatch prices* and *ancillary service prices* developed in accordance with clause 3.9.3(e) prior to the commencement date are taken to have been made under clause 3.9.3(g).

Part Q Regulatory Test Thresholds and Information Disclosure on Network Replacements

11.22 Rules consequential on the making of the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008

11.22.1 Definitions

In this rule 11.22:

amended definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as amended by the Amending Rule.

Amending Rule means the National Electricity Amendment (Regulatory Test Thresholds and Information Disclosure on Network Replacements) Rule 2008.

commencement date means the date on which the Amending Rule commences operation.

old definitions means the definitions of "new large transmission network asset" and "new small transmission network asset" as in force immediately before the commencement date.

11.22.2 Amending Rule does not affect existing regulatory test

The old definitions continue to apply in place of the amended definitions following the commencement date in respect of:

(a) a *new small transmission network asset* for which a *Transmission Network Service Provider* has set out the matters required under clauses 5.6.2A(b)(4) and (5) in an *Annual Planning Report published* prior to the commencement date;

(b) a *new small transmission network asset* not identified in an *Annual Planning Report* for which a *Transmission Network Service Provider* has *published* a report required under clause 5.6.6A(c) prior to the commencement date; and

(c) a *new large transmission network asset* for which a *Transmission Network Service Provider* has taken an action or commenced a process under the *Rules* which relies on or is referenced to the *Regulatory Test* (such as *publishing* an application notice under clause 5.6.6(c)) that has not completed prior to the commencement date.

Part R Performance Standard Compliance of Generators

11.23 Rules consequential on the making of the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008

11.23.1 Definitions

For the purposes of this rule 11.23:

Amending Rule means the National Electricity Amendment (Performance Standards Compliance of Generators) Rule 2008.

Old Clause 5.7.3(b) means the clause 5.7.3(b) in the version of the *Rules* that was in force immediately prior to the commencement of the Amending Rule.

11.23.2 Application of rule 11.23 for compliance programs implemented immediately after the commencement of the Amending Rule

Registered Participants are not required to comply with the obligation set out in rule 4.15(b) until 3 months after the day on which the *Reliability Panel published* its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.3 Application of rule 11.23 for compliance programs implemented immediately prior to the commencement of the Amending Rule

Registered Participants which implemented compliance programs under the Old Clause 5.7.3(b) must maintain compliance with those programs until 3 months after the day on which the *Reliability Panel published* its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

11.23.4 Application of rule 11.23 for compliance programs not implemented immediately prior to the commencement of the Amending Rule

Registered Participants which have not implemented compliance programs under the Old Clause 5.7.3(b) must implement and maintain compliance programs under the Old Clause 5.7.3(b) until 3 months after the day on which the *Reliability Panel published* its initial *template for generator compliance programs* under clause 8.8.3 of the *Rules* or until a date determined by the *Reliability Panel*.

Part S Compensation Arrangements under Administered Pricing

11.24 Rules consequential on the making of National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008

11.24.1 Definitions

In this rule 11.24:

Amending Rule means the National Electricity Amendment (Compensation Arrangements under Administered Pricing) Rule 2008.

commencement date means the date the Amending Rule commences operation.

11.23.2 Compensation Guidelines

All actions taken by the *AEMC* prior to the commencement date in anticipation of the commencement date for the purposes of developing and *publishing* the first compensation guidelines as required by clause 3.14.6(e) are taken to satisfy the equivalent actions required for compensation guidelines under clause 3.14.6(f).

Part U Confidentiality Arrangements concerning Information required for Power System Studies

11.25 Rule consequential on the making of the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009

11.25.1 Definitions

For the purposes of rule 11.25:

Amending Rule means the National Electricity Amendment (Confidentiality Arrangements in Respect of Information Required for Power System Studies) Rule 2009.

Commencement date means the date on which the Amending Rule commences operation.

11.25.2 Transitional arrangements for the provision of information

(a) A *Generator* must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the

circumstances but which must be no later than 27 November 2009, except in relation to the following information:

(1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and

(2) information provided to *NEMMCO* after 15 March 2007 only if the relevant *Generator* has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(l2), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).

(b) A person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, must provide *NEMMCO* with a *releasable user guide* by 29 May 2009 or a date which *NEMMCO* considers to be reasonable in the circumstances but which must be no later than 27 November 2009, except in relation to the following information:

(1) information provided to *NEMMCO* before 15 March 2007 that *NEMMCO* holds at the commencement date only to the extent that such information is of a type required in a *releasable user guide* and was authorized by the *Rules* to be released for the same purpose as intended by clause 3.13.3(l) as at the date that information was provided to *NEMMCO*; and

(2) information provided to *NEMMCO* after 15 March 2007 only if the relevant person described in this paragraph as required under the *Rules* to register as a *Generator*, has provided to *NEMMCO* model source code under clause S5.2.4(b)(6), being the provider identified in clause 3.13.3(l2), and provides its written consent to *NEMMCO* for *NEMMCO* to use information that *NEMMCO* holds at the commencement date of a type required in a *releasable user guide* for the purposes of clause 3.13.3(l).

(c) If a *Generator* provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:

(1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(a); and

(2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).

(d) If a person required under the *Rules* to register as a *Generator* in respect of a *generating system* comprised of *generating units* with a combined *nameplate rating* of 30 MW or more, provided to *NEMMCO* model source code under clause S5.2.4(b)(6) between 15 March 2007 and the commencement date:

(1) it may provide to *NEMMCO* a substitute model source code in respect of its *generating system* in conjunction with a *releasable user guide* provided under rule 11.25.2(b); and

(2) that substitute model source code will be taken to be the model source code provided under clause S5.2.4(b)(6) only if it complies with clause S5.2.4(c).

(e) *Releasable user guide* information provided to *NEMMCO* under clauses 11.25.2(a) and 11.25.2(b) is deemed to be *releasable user guide* information provided under clause S5.2.4(b)(8) and for the purposes of clause 3.13.3(l).

(f) *NEMMCO* must implement any changes to its systems needed to comply with its obligations under the Amending Rule within 12 months of the commencement date.

Part V WACC Reviews: Extension of Time

11.26 Rule consequential on the making of the National Electricity Amendment (WACC Reviews: Extension of Time) Rule 2009

11.26.1 Definitions

In this rule 11.26:

regulatory control period 2010-2015 means the *regulatory control period* commencing on 1 July 2010 in relation to *Distribution Network Service Providers* in South Australia and Queensland.

11.26.2 Extension of time to submit a regulatory proposal for the regulatory control period 2010-2015

(a) This rule 11.26 applies to *Distribution Network Service Providers* in South Australia and Queensland.

(b) Despite clause 6.8.2(b)(1), where a relevant *Distribution Network Service Provider* is required to submit a *regulatory proposal* for the *regulatory control period* 2010-2015 to the *AER* under clause 6.8.2(a), that *regulatory proposal* must be submitted by 1 July 2009.

Part W National Transmission Statement

11.27 Rules consequent on the making of the National Electricity Amendment (National Transmission Statement) Rule 2009

11.27.1 Definitions

For the purposes of this rule 11.27:

Amending Rule 2009 means the National Electricity Amendment (National Transmission Statement) Rule 2009.

commencement date means the date on which the Amending Rule 2009 commences operation.

jurisdictional planning body means an entity nominated from time to time by the relevant *Minister of a participating jurisdiction* as having *transmission system* planning responsibility in that *participating jurisdiction*.

National Transmission Network Development Plan means the document that is to replace the *Annual National Transmission Statement*, the first of which is to be *published* by *AEMO* after 2009

National Transmission Statement means the statement *published* by *AEMO* in accordance with clause 11.27.4.

National Transmission Statement review or **NTS review** means the review conducted by *AEMO* in accordance with clause 11.27.4.

11.27.2 Purpose

The purpose of this rule 11.27 is to require *AEMO* to publish a National Transmission Statement by 31 December 2009 in the place of an *Annual National Transmission Statement* for 2009. This will facilitate the efficient transition from the *Annual National Transmission Statement* in 2008 to the first National Transmission Network Development Plan to be *published* after 2009.

11.27.3 Application of rule 11.27

From the commencement date, rule 11.27 applies despite any other provision of the *Rules* (including any guideline or procedure made under the *Rules*) applicable to the *ANTS review* and *publication* of an *Annual National Transmission Statement* for 2009.

11.27.4 National Transmission Statement

(a) *AEMO* must conduct a review of the following matters:

(1) *national transmission flow paths*;

(2) historical and forecast utilisation of *national transmission flow paths*;

(3) historical and forecast *constraints* in respect of *national transmission flow paths*, including those identified in the *Annual Planning Reports*;

(4) *augmentations* proposed by each *Transmission Network Service Provider* in their most recent *Annual Planning Reports* and the manner in which the proposed *augmentations* relate to the *national transmission flow paths*;

(5) other *network* and non-*network* options identified during the consultation described in paragraph (b) and the manner in which the options relate to the *national transmission flow paths*,

(the "**NTS review**") and prepare and *publish* the National Transmission Statement by 31 December 2009 setting out the results of the NTS review.

(b) *AEMO* must, in carrying out the NTS review, consult with *Registered Participants* and *interested parties* in relation to:

(1) the data and assumptions to be used as part of the review;

(2) the potential options for addressing identified *constraints* impacting *national transmission flow paths*; and

(3) the content of the National Transmission Statement.

(c) In carrying out the NTS review, *AEMO* must consider the following matters:

(1) the location of the current *national transmission flow paths* and the current capacities, *constraints* and congestion points on those flow paths;

(2) the location of the potential *national transmission flow paths* over the next 20 years, and the likely capabilities, *constraints* and congestion points on those flow paths;

(3) the quantity of electricity which flowed, the periods in which the electricity flowed, and *constraints*, on the *national transmission flow paths* over the previous *financial year* or such other period as determined by *AEMO* having regard to data which is available to *AEMO*;

(4) the forecast quantity of electricity which is expected to flow, and the periods in which the electricity is expected to flow, the magnitude and significance of future *network losses* and *constraints* on the current and potential *national transmission flow paths* over the current *financial year*

or such other period as determined by *AEMO* having regard to data which is available to *AEMO*;

(5) the projected capabilities of the existing *transmission network* and the *network control ancillary services* required to support existing and future *transmission network* capabilities;

(6) demand forecasts for the next 20 *financial years;*

(7) possible scenarios for additional *generation* and demand side options to meet demand forecasts;

(8) relevant intra-jurisdictional developments and any incremental works which may be needed to coordinate *national transmission flow path* planning with intra-jurisdictional planning;

(9) the options for relieving forecast *constraints* on the *national transmission flow paths* identified in the *Annual Planning Reports* or through the consultation required under paragraph (b); and

(10) such other matters as *AEMO*, in consultation with the *participating jurisdictions*, considers are appropriate.

(d) In considering the matters described in paragraph (c), *AEMO* must have regard to:

(1) the *Annual Planning Reports published* in 2009; and

(2) information obtained for the purposes of preparing the *statement of opportunities* to be published in 2009;

and may include information from the *Annual Planning Reports* and the *statement of opportunities* in the National Transmission Statement.

(e) In carrying out the NTS review, *AEMO* may seek the assistance of each jurisdictional planning body.

(f) *AEMO* may by written notice request a jurisdictional planning body to provide *AEMO* with any additional information or documents reasonably available to it that *AEMO* reasonably requires for the purpose of the NTS review.

(g) A jurisdictional planning body must comply with a written notice from *AEMO* issued under paragraph (f).

(h) *AEMO* may only use information or documents provided in accordance with paragraphs (f) and (g) for the purpose of preparing the National Transmission Statement or, where relevant, the *statement of opportunities* to be *published* in 2009.

11.27.5 Scope and Content of National Transmission Network Development Plan

The National Transmission Statement must also identify the expected scope and content of the first National Transmission Network Development Plan.

11.27.6 Energy Adequacy Assessment Projection

Despite anything to the contrary in rule 3.7C, until the first *National Transmission Network Development Plan* is published, clause 3.7C(b)(6)(B) is to be taken as requiring the *EAAP* to take into account, where relevant, the matters *AEMO* is required to consider for the purposes of clause 11.27.4(c) in carrying out the *NTS review*.

11.27.7 Amendment to Last Resort Power

The National Transmission Statement is deemed to be an *Annual National Transmission Statement* for 2009 for the purposes of clause 5.6.4(g)(2).

11.27.8 Actions taken prior to commencement of Rule

Any relevant action taken by *NEMMCO* prior to the commencement date is taken to have been made or done in accordance with the *Rules* for the purpose of the Amending Rule 2009.

Part X National Transmission Planning

11.28 Rules consequential on the making of the National Electricity (Australian Energy Market Operator) Amendment Rules 2009

11.28.1 Definitions

In this rule:

amending rules means the National Electricity (Australian Energy Market Operator) Amendment Rules 2009.

commencement date means the date Schedule 2 of the amending rules comes into operation.

new National Electricity Rules means the National Electricity Rules as in force after the commencement date.

old National Electricity Rules means the National Electricity Rules as in force before the commencement date.

11.28.2 Jurisdictional planning bodies and representatives

(a) The former responsible planning entity for a *participating jurisdiction* is taken to be the *jurisdictional planning body* for the *participating jurisdiction* until the relevant *Minister* nominates a different entity under the new National Electricity Rules.

(b) The *representative* from the former responsible planning entity for a *participating jurisdiction* who was a member of the *Inter-regional Planning Committee* immediately before the commencement date is taken to be the *jurisdictional planning representative* for that *participating jurisdiction* under the new National Electricity Rules until another person is nominated under the new National Electricity Rules.

(c) This clause does not apply to a jurisdiction for which *AEMO* is the *jurisdictional planning body*.

(d) In this clause:

former responsible planning entity for a *participating jurisdiction* means the entity that was treated, for the purposes of clause 5.6.3(b)(2) of the old National Electricity Rules, as having *transmission system* planning responsibility in the *participating jurisdiction*.

11.28.3 Criteria and guidelines published by Inter-regional Planning Committee

(a) The old *transmission network augmentation* criteria continue in force, subject to revocation or variation by *AEMO*, as if they had been *published* by *AEMO* under clause 5.6.3(b) of the new National Electricity Rules.

(b) The old inter-network test guidelines continue in force, subject to revocation or variation by *AEMO*, as if they had been *published* by *AEMO* under clause 5.7.7(k) of the new National Electricity Rules.

(c) In this clause:

old inter-network test guidelines means guidelines for assisting *Registered Participants* to determine when an *inter-network test* may be required that were *published* by the *Inter-regional Planning Committee* under clause 5.7.7(k) of the old National Electricity Rules and were applicable immediately before the commencement date.

old transmission network augmentation criteria means criteria for assessing whether a proposed *transmission network augmentation* is reasonably likely to have a *material inter-network impact* that were *published* by the *Inter-regional Planning Committee* under clause 5.6.3(i) of the old National Electricity Rules and were applicable immediately before the commencement date.

11.28.4 Augmentation technical reports

If a request for an *augmentation technical report* was made under clause 5.6.3 of the old National Electricity Rules, but proceedings based on, or related to, the request had not been completed by the commencement date, the proceedings are to be continued and completed by *AEMO* as if anything done under the old National Electricity Rules had been done under the corresponding provisions of the new National Electricity Rules.

11.28.5 Last Resort Planning Power

For the purposes of clause 5.6.4(g)(2) of the new National Electricity Rules, a reference to an *NTNDP* extends to:

(1) the *National Transmission Statement* published under clause 11.27.4;

(2) an *Annual National Transmission Statement* published under clause 5.6.5 of the old National Electricity Rules .

11.28.6 Inter-network power system tests

(a) Proceedings commenced before the commencement date under clause 5.7.7 of the old National Electricity Rules may be continued and completed under clause 5.7.7 of the new National Electricity Rules.

(b) Anything validly done before the commencement date under clause 5.7.7 of the old National Electricity Rules is taken to have been validly done under the corresponding provision of clause 5.7.7 of the new National Electricity Rules.

11.28.7 Control and protection settings for equipment

(a) A matter referred to the *Inter-regional Planning* Committee under clause 5.8.3(d) of the old National Electricity Rules that remained undecided at the commencement date must be decided by *AEMO* within 20 *business days* after the commencement date.

(b) *AEMO's* decision is final.

11.28.8 Revenue Proposals

Clauses 6A.6.6(e)(11) and 6A.6.7(e)(11) of the new National Electricity Rules only apply in respect of a *Revenue Proposal* submitted to the *AER* under clause 6A.10.1 of the new National Electricity Rules more than 20 *business days* after the commencement date.

Part Y Regulatory Investment Test for Transmission

11.29 Rules consequent on making of the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009

11.29.1 Definitions

For the purposes of this rule 11.29:

Amending Rule means the National Electricity Amendment (Regulatory Investment Test for Transmission) Rule 2009.

commencement date means the date on which the Amending Rule commences operation.

current application means any action taken or process initiated under the *Rules* which relies on or is referenced to the *regulatory test* and is not completed as at 1 August 2010.

initiated means:

(a) in respect of a *new large transmission network asset* (as defined under the *Rules* immediately prior to the commencement date), that an application notice has been made available in respect of that asset in accordance with the old clause 5.6.6(c);

(b) in respect of a *new small transmission network asset* (as defined under the *Rules* immediately prior to the commencement date), that consultation has already commenced in respect of that asset in accordance with the old clause 5.6.6A(a).

new clauses 5.6.5B-E means clauses 5.6.5B-E of the *Rules* after the commencement date.

old clause 5.6.2A(b)(5) means clause 5.6.2A(b)(5) of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.5A means clause 5.6.5A of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.6 means clause 5.6.6 of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

old clause 5.6.6A means clause 5.6.6A of the *Rules* (and all definitions in, and relevant provisions of, the *Rules* amended by the Amending Rule) as in force immediately before the commencement date.

11.29.2 Period when Amending Rule applies to transmission investment

(a) For the period from the commencement date to 1 August 2010:

(1) new clauses 5.6.5B-E have no effect in respect of *transmission investment*; and

(2) old clause 5.6.2A(b)(5), old clause 5.6.5A, old clause 5.6.6, old clause 5.6.6A and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of *transmission investment*.

(b) From 1 August 2010:

(1) new clauses 5.6.5B-E will have effect in respect of *transmission investment*;

(2) old clause 5.6.5A, old clause 5.6.6, old clause 5.6.6A, and the *regulatory test* and *regulatory test application guidelines* promulgated from time to time under clause 5.6.5A, continue to apply in respect of any current application; and

(3) for the purposes of an *Annual Planning Report published* before 1 August 2010, old clause 5.6.2A(b)(5) applies to any current application in relation to a *new small transmission network asset* (as defined under the *Rules* immediately prior to the commencement date).

Appendix 1 Form in which Chapter 6 applies to New South Wales and the Australian Capital Territory for the Regulatory Control Period 2009-2014

Note:

This Appendix contains transitional Chapter 6 and is based on general Chapter 6. Matter omitted from numbered provisions of general Chapter 6 is indicated by a row of asterisks (*****).

Chapter 6 Economic Regulation of Distribution Services

Part A Introduction

6.1 Introduction to Chapter 6

6.1.1 AER's regulatory responsibility

The *AER* is responsible, in accordance with this Chapter, for the economic regulation of *distribution services* provided by means of, or in connection with, *distribution systems* that form part of the *national grid*.

6.1.2 Structure of this Chapter

(a) This Chapter deals with the classification and economic regulation of *distribution services*.

(b) It is divided into parts as follows:

(1) this Part is introductory;

(2) Part B provides for the classification of *distribution services* and forms of control for *standard control services* and confers power on the *AER* to determine the forms of control for *alternative control services*, and to make distribution determinations;

(3) Part C sets out the building block approach to the regulation of services classified as *standard control services*;

(4) Part D regulates the prices that may be charged by EnergyAustralia for the provision of services classified as *negotiated distribution services*;

(4A) Part DA regulates the prices for negotiable components of *direct control services* (NSW and ACT);

(5) Part E sets out the procedures for making a distribution determination;

(6) Part F regulates cost allocation;

(7) *****

(8) Part H deals with ring-fencing;

(9) Part I deals with *tariff classes* and tariffs;

(10) Part J deals with billing and settlements;

(11) Part K deals with prudential requirements, prepayments and capital contributions;

(12) Part L deals with dispute resolution;

(13) Part M deals with the disclosure of transmission and distribution charges.

6.1.3 Access to direct control services and negotiated distribution services

(a) Subject to and in accordance with the *Rules*:

(1) a person (a *Service Applicant*) may apply to a *Distribution Network Service Provider* for provision of *direct control services* or *negotiated distribution services*;

(2) a *Distribution Network Service Provider* must provide *direct control services* or *negotiated distribution services* (as the case may be) on *terms and conditions of access* as determined under Chapters 4, 5, this Chapter 6 and Chapter 7 of the Rules.

(b) The *terms and conditions* of access are:

(1) in relation to *negotiated distribution services*:

(i) the price of those services (including, if relevant, *access charges*); and

(ii) other terms and conditions for the provision of those services;

(2) in relation to *direct control services*:

(i) subject to Part DA:

(A) the price of those services under the *approved pricing proposal*, except as provided by subsubparagraph (B); and

(B) in the case of EnergyAustralia's prescribed (transmission) standard control services, the price of those services under EnergyAustralia's approved pricing methodology; and

(ii) other terms and conditions for the provision of those services.

6.1.4 Prohibition of DUOS charges for the export of energy

(a) A *Distribution Network Service Provider* must not charge a *Distribution Network User distribution use of system* charges for the export of electricity generated by the user into the *distribution network*.

(b) This does not, however, preclude charges for the provision of *connection services*.

6.1.5 Application of this Chapter to certain transmission assets – ActewAGL, Country Energy and Integral Energy Australia

(a) This clause 6.1.5 applies to ActewAGL, Country Energy and Integral Energy Australia (each of which is a "relevant provider" for the purposes of this clause).

(b) For the purposes of the regulatory control period 2009-2014:

(1) each part of a relevant provider's *network* that would, but for this clause, be part of the provider's *transmission network* is deemed to be part of the provider's *distribution network* for the purposes of this Chapter 6 and Chapter 6A; and

(2) despite anything in those Chapters, those Chapters have effect accordingly.

(c) This clause 6.1.5 does not affect the operation of the *Rules*, apart from:

(1) this Chapter 6 and Chapter 6A; and

(2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.

(d) However, the relevant providers are not required to submit revenue proposals under clause 6A.10.1.

6.1.6 Application of this Chapter to the EnergyAustralia transmission support network

(a) This clause 6.1.6 applies to EnergyAustralia.

(b) For the purposes of the regulatory control period 2009-2014:

(1) the EnergyAustralia transmission support network is deemed to be part of EnergyAustralia's *distribution network* for the purposes of this Chapter and Chapter 6A; and

(2) despite anything in those Chapters, those Chapters have effect accordingly.

(c) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *prescribed transmission service* is:

(1) deemed to be classified as a *direct control service* and further classified as a *standard control service*; and

(2) referred to in this Chapter as an "EnergyAustralia prescribed (transmission) standard control service".

(d) A service that is provided by EnergyAustralia by means of, or in connection with, the EnergyAustralia transmission support network and that, but for this clause, would be a *negotiated transmission service* is:

(1) deemed to be classified as a *negotiated distribution service*;

(2) referred to in the Rules as an "EnergyAustralia negotiated distribution service".

(e) Part J of Chapter 6A applies to EnergyAustralia prescribed (transmission) standard control services to the exclusion of Parts I, J and K, and so applies as if:

(1) references in Part J of Chapter 6A to a *prescribed transmission service* were references to Energy Australia prescribed (transmission) standard control services; and

(2) the reference in clause 6A.22.1 to clause 6A.3.2 were a reference to rules 6.6 and 6.13;

and with any other necessary modifications.

(f) This clause 6.1.6 does not affect the operation of the *Rules*, apart from:

(1) this Chapter 6 and Chapter 6A; and

(2) the definitions of *distribution network* and *transmission network* in Chapter 10 in relation to this Chapter 6 and Chapter 6A.

6.1.7 Definitions

(a) In this Chapter (including Schedules 6.1 and 6.2):

"ActewAGL" means the joint venture between ACTEW Distribution Limited ACN 073 025 224 and Alinta GCA Pty Ltd ACN 008 552 663 providing *distribution services* in the Australian Capital Territory, or any successor or successors of that joint venture.

"commencement date" means the date of commencement of transitional Chapter 6.

"Cost Allocation Method" means:

(a) for NSW Distribution Network Service Providers – the Cost Allocation Method approved under clause 6.15.6 as in force from time to time; or

(b) for the ACT Distribution Network Service Provider – the Cost Allocation Method approved under clause 6.15.8 as in force from time to time.

"Country Energy" means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

"EnergyAustralia" means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

"EnergyAustralia negotiated distribution service" – see clause 6.1.6(d).

"EnergyAustralia prescribed (transmission) standard control service" – see clause 6.1.6(c).

"EnergyAustralia transmission support network" means any part of a network owned, controlled or operated by EnergyAustralia and operating between 66 kV and 220 kV that operates in parallel to and provides support to the higher voltage *transmission network*.

"ICRC" means the Independent Competition and Regulatory Commission of the Australian Capital Territory, which is established under section 5(1) of the Independent Competition and Regulatory Commission Act 1997 (ACT).

"Integral Energy Australia" means the energy services corporation of that name, which is constituted under section 7 of the Energy Services Corporations Act 1995 (NSW) and specified in Part 2 of Schedule 1 to that Act, or any successor or successors of that corporation.

"IPART" means the Independent Pricing and Regulatory Tribunal of New South Wales, which is established under section 5(1) of the Independent Pricing and Regulatory Tribunal Act 1992 (NSW).

"regulatory control period 2004-2009" means the regulatory control period of 5 years commencing on 1 July 2004.

"regulatory control period 2009-2014" means the regulatory control period of 5 years commencing on 1 July 2009 and referred to in rule 11.15.

"transitional Chapter 6" means this Chapter (being transitional Chapter 6 as defined in rule 11.15).

(b) In this Chapter and in rule 11.15:

(1) a reference to the NSW Distribution Network Service Providers is a reference to Country Energy, EnergyAustralia and Integral Energy Australia; and

(2) a reference to the ACT Distribution Network Service Provider is a reference to ActewAGL.

Part B Classification of Distribution Services and Distribution Determinations

6.2 Classification

6.2.1 *****

6.2.2 *****

6.2.3 *****

6.2.3A Classes and subclasses of distribution services

(a) *Distribution services* to be provided by a *Distribution Network Service Provider* are divided into the following 3 classes:

(1) *direct control services*;

(2) *negotiated distribution services*;

(3) unregulated *distribution services*.

Note:

Certain services provided by means of, or in connection with, the EnergyAustralia transmission support network (which is deemed by clause 6.1.6(b) to be part of EnergyAustralia's distribution network) are deemed by clause 6.1.6(d) to be classified as negotiated distribution services for certain purposes.

(b) *Direct control services* are further divided into the following 2 subclasses:

(1) *standard control services*; and

(2) *alternative control services*.

6.2.3B Classification for NSW Distribution Network Service Providers

(a) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.

Note:

The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) provided that prescribed distribution services include:

- *Distribution Use of System Services*
- *Private Power Line Inspections and Customer Installation Inspections*
- *certain Monopoly Services*
- *certain Miscellaneous Services*
- *certain Emergency Recoverable Works.*

(b) A *distribution service* that is provided by a NSW Distribution Network Service Provider and that was determined by the IPART to be an excluded distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014):

(1) in the case of the excluded distribution service of the construction and maintenance of public lighting infrastructure – to be classified as a *direct control service* and further classified as an *alternative control service*;

(2) in the case of any other excluded distribution service – to be classified as:

(i) an unregulated *distribution service*, unless the *AER* has made a determination under paragraph (e) in relation to that *distribution service*; or

(ii) an *alternative control service*, if the *AER* has made a determination under paragraph (e) in relation to that *distribution service*.

Note:

1. Other distribution services provided by a NSW Distribution Network Service Provider are unclassified and not regulated under the Rules.

2. The IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/2005 to 2008/2009) determined that the following Distribution Services are Excluded Distribution Services):

- *the construction and maintenance of Public Lighting Infrastructure*
- *Customer Funded Connections*
- *Customer Specific Services*
- *Type 1 to 4 Metering Services.*

(c) A NSW Distribution Network Service Provider is, in relation to a *distribution service* classified as an unregulated *distribution service*, required to comply substantially with the relevant requirements of the provisions of Rule 2004/1 (Regulation of Excluded Distribution Services) made by the IPART in relation to the regulatory control period 2004-2009.

Note:

Distribution services provided by a NSW Distribution Network Service Provider that are unclassified are not regulated under the Rules, and accordingly are not required to comply with the requirements of Rule 2004/1.

(d) For the purposes of paragraph (c), the provisions of Rule 2004/1 have effect as if references to the IPART were references to the *AER* and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014, and with any other necessary modifications.

(e) The *AER* may, at any time during the regulatory control period 2009-2014, determine that a NSW Distribution Network Service Provider is not or has

ceased to be in substantial compliance with the requirements of the provisions referred to in paragraph (c) if the AER has:

(1) given the provider a written notice inviting the provider to show cause within a specified period of at least 2 weeks why the *AER* should not make the determination and setting out the grounds on which the *AER* would make the determination; and

(2) taken into consideration any written submissions made by the provider to the *AER* within that period in response to the notice.

(f) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *distribution service* cannot during the remainder of the regulatory control period 2009-2014 be classified again as an unregulated *distribution service*, unless it appears to the *AER* that the determination is affected by a material error or deficiency of a kind referred to in rule 6.13(a).

(g) Provisions having effect as referred to in paragraph (c) may be included in a distribution determination in any appropriate format.

(h) Once a *distribution service* has been classified as an *alternative control service* because of a determination by the *AER* under paragraph (e), the *AER* must make such amendments to the relevant distribution determination as are necessary to regulate the *distribution service* as an *alternative control service*.

(i) When making the distribution determination for a NSW Distribution Network Service Provider, the *AER* may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3B of a *distribution service* provided by the provider.

(j) A deemed or varied classification under this clause 6.2.3B forms part of a distribution determination and operates for the regulatory control period 2009-2014.

6.2.3C Classification for ACT Distribution Network Service Provider

(a) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be a prescribed distribution service (for the purposes of the regulatory control period 2004-2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as a *standard control service*.

(b) A *distribution service* that is provided by the ACT Distribution Network Service Provider and that was determined by the ICRC to be an excluded distribution service (for the purposes of the regulatory control period 2004-

2009) is deemed (for the purposes of the regulatory control period 2009-2014) to be classified as a *direct control service* and further classified as an *alternative control service*.

(c) When making the distribution determination for the ACT Distribution Network Service Provider, the *AER* may, with the agreement of the provider, vary the deemed classification effected by this clause 6.2.3C of a *distribution service* provided by the provider.

(d) A deemed or varied classification under this clause 6.2.3C forms part of a distribution determination and operates for the regulatory control period 2009-2014.

Note:

The ICRC's Final Decision-Investigation into prices for electricity distribution services in the ACT-Report No 6 of 2004 (relating to ACT Electricity Distribution Pricing 2004/2005 to 2008/2009) provided that prescribed distribution services include all distribution services provided by ActewAGL, with the exception of the provision of and servicing of meters for customers consuming fewer than 160 megawatt hours per annum, including:

- *meter testing*
- *meter reading*
- *meter checking*
- *the processing of metering data*
- *the provision of non-standard meters.*

The services covered by the exception are accordingly Excluded Distribution Services.

6.2.4 Duty of AER to make distribution determinations

(a) The *AER* must make a distribution determination for each *Distribution Network Service Provider*.

(b) When the *AER* makes a distribution determination it must follow the process set out in Part E.

(c) *****

(d) *****

6.2.5 Control mechanisms for direct control services

(a) A distribution determination is to impose controls over the prices of *direct control services*, the revenue to be derived from *direct control services* or both.

(b) *****

(c) *****

(c1) The control mechanism for:

(1) subject to subparagraph (3), *standard control services* provided by a NSW Distribution Network Service Provider in the regulatory control period 2009-2014:

(i) must be substantially the same as that determined by the IPART for the corresponding prescribed distribution services provided in the regulatory control period 2004-2009; and

(ii) may, with the agreement of the provider, apply differently for different categories of services; and

(2) *standard control services* provided by the ACT Distribution Network Service Provider in the regulatory control period 2009-2014 must be substantially the same as that determined by the ICRC for prescribed distribution services provided in the regulatory control period 2004-2009; and

(3) EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014 and referred to in clause 6.1.6(c) must be substantially the same as that determined by the ACCC for the corresponding *prescribed transmission services* provided in the regulatory control period 2004-2009.

(c2) The control mechanism for *alternative control services* may consist of:

(1) a schedule of fixed prices;

(2) caps on the prices of individual services;

(3) caps on the revenue to be derived from a particular combination of services;

(4) tariff basket price control;

(5) revenue yield control;

(6) a combination of any of the above.

(d) In deciding on a control mechanism for *alternative control services*, the *AER* must have regard to:

(1) the potential for development of competition in the relevant market and how the control mechanism might influence that potential; and

(2) the possible effects of the control mechanism on administrative costs of the *AER*, the *Distribution Network Service Provider* and users or potential users; and

(3) the regulatory arrangements (if any) applicable to the relevant service immediately before the commencement of the distribution determination; and

(4) the desirability of consistency between regulatory arrangements for similar services (both within and beyond the relevant jurisdiction); and

(5) any other relevant factor.

(e) The *AER* must, before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), *publish* a statement indicating its likely approach to the control mechanisms for *alternative control services*. In preparing the statement, the AER may carry out such consultation as the AER thinks appropriate and may take into consideration any consultation carried out before the commencement date.

6.2.6 Basis of control mechanisms for direct control services

(a) For *standard control services*, the control mechanism must be of the prospective CPI minus X form, or some incentive-based variant of the prospective CPI minus X form, in accordance with Part C.

(b) For *alternative control services*, the control mechanism must have a basis stated in the distribution determination.

(c) The control mechanism for *alternative control services* may (but need not) utilise elements of Part C (with or without modification).

Examples:

The control mechanism might be based on the building block approach.

The distribution determination might provide for the application of clause 6.6.1 to pass through events with necessary adaptations and specified modifications.

6.2.7 EnergyAustralia negotiated distribution services

Negotiated distribution services provided by EnergyAustralia are regulated in accordance with Part D.

6.2.7A Negotiable components of direct control services (NSW and ACT)

Despite anything in this Division 2, the control mechanism for *direct control services* may include elements referred to as negotiable components of *direct control services*, as provided in Part DA.

6.2.8 Guidelines

(a) The *AER* may *publish* guidelines as to:

(1) *****

(2) the control mechanisms for *direct control services*; and

(3) the calculation of stand-alone, avoidable and long-run marginal costs; and

(4) the *AER's* likely approach to determining materiality in the context of possible *pass through events*; and

(4A) the transition from pre-tax to post-tax revenue regulation; and

(5) other matters relevant to this Chapter.

(b) The guidelines may relate to a specified *Distribution Network Service Provider* or *Distribution Network Service Providers* of a specified class.

(c) The guidelines are not mandatory (and hence do not bind the *AER* or anyone else) but, if the *AER* makes a distribution determination that is not in accordance with a relevant guideline, the *AER* must state, in its reasons for the distribution determination, the reasons for departing from the guideline.

(d) If the guidelines indicate that there may be a change of regulatory approach in future distribution determinations, the guidelines should also (if practicable) indicate how transitional issues are to be dealt with.

(e) *****

(f) In making or amending a guideline, the *AER* may carry out such consultation as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

Part C Building Block Determinations for standard control services

6.3 Building block determinations

6.3.1 Introduction

(a) A *building block determination* is a component of a distribution determination.

(b) The procedure for making a *building block determination* is contained in Part E of this Chapter and involves the submission of a *building block proposal* to the *AER* by the *Distribution Network Service Provider*.

(c) The *building block proposal*:

(1) must be prepared in accordance with the *post-tax revenue model*, other relevant requirements of this Part, and Schedule 6.1; and

(2) must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

6.3.2 Contents of building block determination

(a) A *building block determination* for a *Distribution Network Service Provider* is to specify, for a *regulatory control period*, the following matters:

(1) the Distribution Network Service Provider's annual revenue requirement for each regulatory year of the regulatory control period;

(2) appropriate methods for the indexation of the regulatory asset base;

(3) how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* are to apply to the *Distribution Network Service Provider*;

(4) the commencement and length of the *regulatory control period*;

(5) any other amounts, values or inputs on which the *building block determination* is based (differentiating between those contained in, or inferred from, the service provider's *building block proposal* and those based on the *AER*'s own estimates or assumptions).

(b) *****

6.4 Post-tax revenue model

6.4.1 Preparation, publication and amendment of post-tax revenue model

(a) The *AER* must prepare and *publish* a *post-tax revenue model*.

(b) *****

(c) *****

(d) The *AER* must *publish* the first *post-tax revenue model* before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

(e) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *post-tax revenue model*.

6.4.2 Contents of post-tax revenue model

(a) The *post-tax revenue model* must set out the manner in which the *Distribution Network Service Provider*'s *annual revenue requirement* for each *regulatory year* of a *regulatory control period* is to be calculated.

(b) The contents of the *post-tax revenue model* must include (but are not limited to):

(1) a method that the *AER* determines is likely to result in the best estimates of expected inflation; and

(2) the timing assumptions and associated discount rates that are to apply in relation to the calculation of the building blocks referred to in clause 6.4.3; and

(3) the manner in which working capital is to be treated; and

(4) the manner in which the estimated cost of corporate income tax is to be calculated.

6.4.3 Building block approach

(a) Building blocks generally

The *annual revenue requirement* for a *Distribution Network Service Provider* for each *regulatory year* of a *regulatory control period* must be

determined using a building block approach, under which the building blocks are:

(1) indexation of the regulatory asset base – see paragraph (b)(1); and

(2) a return on capital for that year – see paragraph (b)(2); and

(3) the depreciation for that year – see paragraph (b)(3); and

(4) the estimated cost of corporate income tax of the provider for that year – see paragraph (b)(4); and

(5) the revenue increments or decrements (if any) for that year arising from the application of the *service target performance incentive scheme* and the *demand management incentive scheme* – see paragraph (b)(5); and

(6) the other revenue increments or decrements (if any) for that year arising from the application of a control mechanism in the previous *regulatory control period* – see paragraph (b)(6); and

(7) the forecast operating expenditure for that year – see paragraph (b)(7); and

(8) certain revenue increments or decrements for that year arising from the D-factor carry forward – see paragraph (b)(8).

(b) Details of the building blocks

For the purposes of paragraph (a):

(1) for indexation of the regulatory asset base:

(i) the regulatory asset base is calculated in accordance with clause 6.5.1 and schedule 6.2; and

(ii) the building block comprises a negative adjustment equal to the amount referred to in clause S6.2.3(c)(4) for that year; and

(2) the return on capital is calculated in accordance with clause 6.5.2; and

(3) the depreciation is calculated in accordance with clause 6.5.5; and

(4) the estimated cost of corporate income tax is determined in accordance with clause 6.5.3; and

(5) the revenue increments or decrements referred to in paragraph (a)(5) are those that arise as a result of the operation of an applicable *service*

target performance incentive scheme or *demand management incentive scheme* as referred to in clauses 6.6.2 and 6.6.3; and

(6) the other revenue increments or decrements referred to in paragraph (a)(6) are those that are to be carried forward to the current *regulatory control period* as a result of the application of a control mechanism in the previous *regulatory control period* and are apportioned to the relevant year under the distribution determination for the current *regulatory control period*; and

(7) the forecast operating expenditure for the year is the forecast operating expenditure as accepted or substituted by the *AER* in accordance with clause 6.5.6; and

(8) the revenue increments or decrements are those that arise as a result of the operation of the arrangements in clause 11 of the IPART's Final Determination No 2, 2004 (relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09) for expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009.

(c) The arrangements referred to in paragraph (b)(8) have effect in relation to expenditure or foregone revenue in each of the last 2 *regulatory years* of the regulatory control period 2004-2009:

(1) as if references to the IPART were references to the *AER* and references to the regulatory control period 2004-2009 were references to the regulatory control period 2009-2014; and

(2) with any other necessary modifications.

6.5 Matters relevant to the making of building block determinations

6.5.1 Regulatory asset base

Nature of regulatory asset base

(a) The regulatory asset base for a *distribution system* owned, controlled or operated by a *Distribution Network Service Provider* is the value of those assets that are used by the provider to provide *standard control services*, but only to the extent that they are used to provide such services.

Preparation, publication and amendment of model for rolling forward regulatory asset base

(b) The *AER* must develop and *publish* a model for the roll forward of the regulatory asset base for *distribution systems*, referred to as the *roll forward model*.

(c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace the *roll forward model*.

(d) The *AER* must develop and *publish* the first *roll forward model*, before 1 February 2008 or the date that is one month after the commencement date (whichever is the later), and may carry out such consultation in connection with the preparation of the model as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date. There must be such a model available at all times after that date.

Contents of roll forward model

(e) The *roll forward model* must set out the method for determining the roll forward of the regulatory asset base for *distribution systems*:

(1) from the immediately preceding *regulatory control period* to the beginning of the first year of the subsequent *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of the first *regulatory year* of that subsequent *regulatory control period*; and

(2) from one *regulatory year* in a *regulatory control period* to a subsequent *regulatory year* in that same *regulatory control period*, so as to establish the value of the regulatory asset base as at the beginning of that subsequent *regulatory year*;

under which:

(3) the roll forward of the regulatory asset base from the immediately preceding *regulatory control period* to the beginning of the first *regulatory year* of a subsequent *regulatory control period* entails the value of the first mentioned regulatory asset base being adjusted for actual inflation, consistently with the method used for the indexation of the control mechanism (or control mechanisms) for *standard control services* during the preceding *regulatory control period*.

Other provisions relating to regulatory asset base

(f) Other provisions relating to regulatory asset bases are set out in schedule 6.2.

(g) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for the ACT Distribution Network Service Provider, and despite clause S6.2.1(e), the *roll forward model* must apply the approach adopted by the ICRC in the distribution

determination for the regulatory control period 2004-2009, but taking into account any written representations by the ICRC to the ACT Distribution Network Service Provider before the commencement date.

(h) For the purpose of establishing the value of the regulatory asset base (as referred to in paragraph (e)(1)) as at the beginning of the first *regulatory year* of the regulatory control period 2009-2014 for EnergyAustralia, the *roll forward model* in respect of transmission network support assets must be applied as if the *AER* were separately regulating EnergyAustralia's transmission system under the relevant provisions of Chapter 6A.

6.5.2 Return on capital

Calculation of return on capital

(a) The return on capital for each *regulatory year* must be calculated by applying a rate of return for the relevant *Distribution Network Service Provider* for that *regulatory control period* (calculated in accordance with this clause 6.5.2) to the value of the regulatory asset base for the relevant *distribution system* as at the beginning of that *regulatory year* (as established in accordance with clause 6.5.1 and schedule 6.2).

Weighted average cost of capital

(b) The rate of return for a *Distribution Network Service Provider* for a *regulatory control period* is the cost of capital as measured by the return required by investors in a commercial enterprise with a similar nature and degree of non-diversifiable risk as that faced by the *distribution* business of the provider and must be calculated as a nominal post-tax *weighted average cost of capital* ("*WACC*") in accordance with the following formula:

$$\text{WACC} = k_e \frac{E}{V} + k_d \frac{D}{V}$$

where:

$\mathbf{k_e}$ is the return on equity (determined using the Capital Asset Pricing Model) and is calculated as:

$r_f + \beta e \times \text{MRP}$

where:

r_f is the nominal risk free rate for the *regulatory control period* determined in accordance with paragraph (c);

βe (the equity beta) is deemed to be 1.0; and

MRP (the market risk premium) is deemed to be 6.0%;

$\mathbf{k_d}$ is the return on debt and is calculated as:

r_f + DRP

where:

DRP is the debt risk premium for the *regulatory control period* determined in accordance with paragraph (e);

E/V is the value of equity as a proportion of the value of equity and debt, which is 1 - D/V; and

D/V (the value of debt as a proportion of the value of equity and debt) is deemed to be 0.6.

Meaning of nominal risk free rate

(c) The nominal risk free rate for a *regulatory control period* is the rate determined for that *regulatory control period* by the *AER* on a moving average basis from the annualised yield on Commonwealth Government bonds with a maturity of 10 years using:

(1) the indicative mid rates published by the Reserve Bank of Australia; and

(2) a period of time which is either:

(i) a period ('the **agreed period'**) proposed by the relevant *Distribution Network Service Provider*, and agreed by the *AER* (such agreement is not to be unreasonably withheld); or

(ii) a period specified by the *AER*, and notified to the provider within a reasonable time prior to the commencement of that period, if the period proposed by the provider is not agreed by the *AER* under subparagraph (i),

and, for the purposes of subparagraph (i):

(iii) the start date and end date for the agreed period may be kept confidential, but only until the expiration of the agreed period; and

(iv) the *AER* must notify the *Distribution Network Service Provider* whether or not it agrees with the proposed period within 30 *business days* of the date of submission of the *building block proposal*.

(d) If there are no Commonwealth Government bonds with a maturity of 10 years on any day in the period referred to in paragraph (c)(2), the *AER* must determine the nominal risk free rate for the *regulatory control period* by interpolating on a straight line basis from the two Commonwealth Government bonds closest to the 10 year term and which also straddle the 10 year expiry date.

Meaning of debt risk premium

(e) The debt risk premium for a *regulatory control period* is the premium determined for that *regulatory control period* by the *AER* as the margin between the 10 year Commonwealth annualised bond rate and the observed annualised Australian benchmark corporate bond rate for corporate bonds which have a maturity of 10 years and a credit rating of BBB+ from Standard and Poors.

6.5.3 Estimated cost of corporate income tax

The estimated cost of corporate income tax of a *Distribution Network Service Provider* for each *regulatory year* (ETC_t) must be calculated in accordance with the following formula:

$$ETC_t = (ETI_t \times r_t)\ (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that *regulatory year* that would be earned by a benchmark efficient entity as a result of the provision of *standard control services* if such an entity, rather than the *Distribution Network Service Provider,* operated the business of the *Distribution Network Service Provider,* such estimate being determined in accordance with the *post-tax revenue model*;

r_t is the expected statutory income tax rate for that *regulatory year* as determined by the *AER*; and

γ (the assumed utilisation of imputation credits) is deemed to be 0.5.

For these purposes:

(1) the cost of debt must be based on that of a benchmark efficient *Distribution Network Service Provider*; and

(2) the estimate must take into account the estimated depreciation for that *regulatory year* for *tax* purposes, for a benchmark efficient *Distribution Network Service Provider*, of assets where the value of those assets is included in the regulatory asset base for the relevant *distribution system* for that *regulatory year*.

6.5.4 *****

6.5.5 Depreciation

(a) The depreciation for each *regulatory year*:

(1) must be calculated on the value of the assets as included in the regulatory asset base, as at the beginning of that *regulatory year*, for the relevant *distribution system*; and

(2) must be calculated:

(i) providing such depreciation schedules conform with the requirements set out in paragraph (b), using the depreciation schedules for each asset or category of assets that are nominated in the relevant *Distribution Network Service Provider*'s *building block proposal*; or

(ii) to the extent the depreciation schedules nominated in the provider's *building block proposal* do not so conform, using the depreciation schedules determined for that purpose by the *AER*.

(b) The depreciation schedules referred to in paragraph (a) must conform to the following requirements:

(1) the schedules must depreciate using a profile that reflects the nature of the assets or category of assets over the economic life of that asset or category of assets;

(2) the sum of the real value of the depreciation that is attributable to any asset or category of assets over the economic life of that asset or category of assets (such real value being calculated as at the time the value of that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system*) must be equivalent to the value at which that asset or category of assets was first included in the regulatory asset base for the relevant *distribution system;*

(3) the economic life of the relevant assets and the depreciation methods and rates underpinning the calculation of depreciation for a given *regulatory control period* must be consistent with those determined for the same assets on a prospective basis in the distribution determination for that period.

6.5.6 Forecast operating expenditure

(a) A *building block proposal* must include the total forecast operating expenditure for the relevant *regulatory control period* which the

Distribution Network Service Provider considers is required in order to achieve each of the following (the *operating expenditure objectives*):

(1) meet or manage the expected demand for *standard control services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;

(3) maintain the quality, reliability and security of supply of *standard control services*;

(4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.

(b) The forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:

(1) comply with the requirements of any relevant *regulatory information instrument*; and

(2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and

(3) include both:

(i) the total of the forecast operating expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the operating expenditure for each *regulatory year* of the relevant *regulatory control period*.

(c) The *AER* must accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast operating expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *operating expenditure objectives*; and

(2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *operating expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *operating expenditure objectives*.

(the *operating expenditure criteria*).

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required operating expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal.*

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following (the *operating expenditure factors*):

(1) the information included in or accompanying the *building block proposal*;

(2) submissions received in the course of consulting on the *building block proposal*;

(3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;

(4) benchmark operating expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;

(5) the actual and expected operating expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent the forecast of required operating expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.7 Forecast capital expenditure

(a) A *building block proposal* must include the total forecast capital expenditure for the relevant *regulatory control period* which the *Distribution Network Service Provider* considers is required in order to achieve each of the following (the *capital expenditure objectives*):

(1) meet or manage the expected demand for *standard control services* over that period;

(2) comply with all applicable *regulatory obligations or requirements* associated with the provision of *standard control services*;

(3) maintain the quality, reliability and security of supply of *standard control services*;

(4) maintain the reliability, safety and security of the *distribution system* through the supply of *standard control services*.

(b) The forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* must:

(1) comply with the requirements of any relevant *regulatory information instrument*; and

(2) be for expenditure that is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the *Distribution Network Service Provider*; and

(3) include both:

(i) the total of the forecast capital expenditure for the relevant *regulatory control period*; and

(ii) the forecast of the capital expenditure for each *regulatory year* of the relevant *regulatory control period*; and

(4) identify any forecast capital expenditure that is for an option that has satisfied the *regulatory test*.

(c) The *AER* must accept the forecast of required capital expenditure of a *Distribution Network Service Provider* that is included in a *building block proposal* if the *AER* is satisfied that the total of the forecast capital expenditure for the *regulatory control period* reasonably reflects:

(1) the efficient costs of achieving the *capital expenditure objectives*; and

(2) the costs that a prudent operator in the circumstances of the relevant *Distribution Network Service Provider* would require to achieve the *capital expenditure objectives*; and

(3) a realistic expectation of the demand forecast and cost inputs required to achieve the *capital expenditure objectives*.

(the *capital expenditure criteria*)

(d) If the *AER* is not satisfied as referred to in paragraph (c), it must not accept the forecast of required capital expenditure of a *Distribution Network Service Provider*.

(e) In deciding whether or not the *AER* is satisfied as referred to in paragraph (c), the *AER* must have regard to the following ('the *capital expenditure factors'*):

(1) the information included in or accompanying the *building block proposal*;

(2) submissions received in the course of consulting on the *building block proposal*;

(3) analysis undertaken by or for the *AER* and *published* before the distribution determination is made in its final form;

(4) benchmark capital expenditure that would be incurred by an efficient *Distribution Network Service Provider* over the *regulatory control period*;

(5) the actual and expected capital expenditure of the *Distribution Network Service Provider* during any preceding *regulatory control periods*;

(6) the relative prices of operating and capital inputs;

(7) the substitution possibilities between operating and capital expenditure;

(8) whether the total labour costs included in the capital and operating expenditure forecasts for the *regulatory control period* are consistent with the incentives provided by the applicable *service target performance incentive scheme* in respect of the *regulatory control period*;

(9) the extent the forecast of required capital expenditure of the *Distribution Network Service Provider* is referable to arrangements with a person other than the provider that, in the opinion of the *AER*, do not reflect arm's length terms;

(10) the extent the *Distribution Network Service Provider* has considered, and made provision for, efficient non-network alternatives.

6.5.8 Efficiency benefit sharing scheme

(a) The *AER* may develop and *publish* a scheme or schemes (*efficiency benefit sharing scheme*) that provide for a fair sharing between NSW and ACT Distribution Network Service Providers and *Distribution Network Users* of:

(1) the efficiency gains derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being less than; and

(2) the efficiency losses derived from the operating expenditure of *Distribution Network Service Providers* for a *regulatory control period* being more than,

the forecast operating expenditure accepted or substituted by the *AER* for that *regulatory control period*.

(b) An *efficiency benefit sharing scheme* may (but is not required to) be developed to cover efficiency gains and losses related to capital expenditure or *distribution losses*.

(c) In developing and implementing an *efficiency benefit sharing scheme*, the *AER* must have regard to:

(1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(2) the need to provide *Distribution Network Service Providers* with a continuous incentive, so far as is consistent with economic efficiency, to reduce operating expenditure and, if the scheme extends to capital expenditure, capital expenditure; and

(3) the desirability of both rewarding *Distribution Network Service Providers* for efficiency gains and penalising *Distribution Network Service Providers* for efficiency losses; and

(4) any incentives that *Distribution Network Service Providers* may have to capitalise expenditure; and

(5) the possible effects of the scheme on incentives for the implementation of non-network alternatives.

(d) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace an *efficiency benefit sharing scheme*.

(e) The *AER* must *publish* a written statement, when it *publishes* its first *efficiency benefit sharing scheme* (if any), setting out how it proposes the *efficiency benefit sharing scheme* will operate for the next distribution determination. The statement may be included in the first *efficiency benefit sharing scheme* or may be *published* separately.

(f) However, despite *publishing* an *efficiency benefit sharing scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.

(g) The *AER* may carry out such consultation in connection with the preparation of an *efficiency benefit sharing scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

(h) If an *efficiency benefit sharing scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *efficiency benefit sharing scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.

(i) The *AER* may monitor and collect information from any or all of the NSW and ACT Distribution Network Service Providers on matters relevant to be included in an *efficiency benefit sharing scheme* for the purpose of developing, amending or applying an *efficiency benefit sharing scheme* for the regulatory control period commencing on 1 July 2014.

6.5.9 The X factor

(a) A *building block determination* is to include the X factor for each control mechanism for each *regulatory year* of the *regulatory control period*.

(b) The X factor:

(1) must be set by the *AER* with regard to the *Distribution Network Service Provider*'s total *revenue requirement* for the *regulatory control period*; and

(2) must be such as to minimise, as far as reasonably possible, variance between expected revenue for the last *regulatory year* of the *regulatory control period* and the *annual revenue requirement* for that last *regulatory year*; and

(3) must conform with whichever of the following requirements is applicable:

(i) if the control mechanism relates generally to *standard control services* – the X factor must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* over the *regulatory control period* with the provider's *total revenue requirement* for the *regulatory control period*;

(ii) if there are separate control mechanisms for different *standard control services* – the X factor for each control mechanism must be designed to equalise (in terms of net present value) the revenue to be earned by the *Distribution Network Service Provider* from the provision of *standard control services* to which the control mechanism relates over the *regulatory control period* with the portion of the provider's *total revenue requirement* for the *regulatory control period* attributable to those services.

(c) There may be different X factors:

(1) for different regulatory years of the regulatory control period; and

(2) if there are 2 or more control mechanisms – for each control mechanism.

6.6 Adjustments after making of building block determination

6.6.1 Cost pass through

(a) If a *positive change event* occurs, a *Distribution Network Service Provider* may seek the approval of the *AER* to pass through to Distribution *Network Users* a *positive pass through amount*.

(b) If a *negative change event* occurs, the *AER* may require the *Distribution Network Service Provider* to pass through to *Distribution Network Users* a *negative pass through amount* as determined by the *AER* under paragraph (g).

Positive pass through

(c) To seek the approval of the *AER* to pass through a *positive pass through amount*, a *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of the relevant *positive change event* occurring, a written statement which specifies:

(1) the details of the *positive change event*; and

(2) the date on which the *positive change event* occurred; and

(3) the *eligible pass through amount* in respect of that *positive change event*; and

(4) the *positive pass through amount* the provider proposes in relation to the *positive change event*; and

(5) the amount of the *positive pass through amount* that the provider proposes should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*; and

(6) evidence:

(i) of the actual and likely increase in costs referred to in subparagraph (3); and

(ii) that such costs occur solely as a consequence of the *positive change event*; and

(7) such other information as may be required under any relevant *regulatory information instrument*.

(d) If the *AER* determines that a *positive change event* has occurred in respect of a statement under paragraph (c), the *AER* must determine:

(1) the *approved pass through amount*; and

(2) the amount of that *approved pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*,

taking into account the matters referred to in paragraph (j).

(e) If the *AER* does not make the determinations referred to in paragraph (d) within 60 *business days* from the date it receives the *Distribution Network Service Provider's* statement and accompanying evidence under paragraph (c), then, on the expiry of that period, the *AER* is taken to have determined that:

(1) the *positive pass through amount* as proposed in the provider's statement under paragraph (c) is the *approved pass through amount* in respect of that *positive change event*; and

(2) the amount of that *positive pass through amount* that the provider proposes in its statement under paragraph (c) should be passed through to *Distribution Network User*s in each *regulatory year* during the *regulatory control period*, is the amount that should be so passed through in each such *regulatory year*.

Negative pass through

(f) A *Distribution Network Service Provider* must submit to the *AER*, within 90 *business days* of becoming aware of the occurrence of a *negative change event* for the provider, a written statement which specifies:

(1) the details of the *negative change event* concerned; and

(2) the date the *negative change event* occurred; and

(3) the costs in the provision of *standard control services* that the provider has saved and is likely to save until the end of the *regulatory control period* as a result of the *negative change event*; and

(4) the aggregate amount of those saved costs that the provider proposes should be passed through to *Distribution Network User*s; and

(5) the amount of the costs referred to in subparagraph (4) the provider proposes should be passed through to *Distribution Network User*s in each *regulatory year* during the *regulatory control period*; and

(6) such other information as may be required under any relevant *regulatory information instrument*.

(g) If a *negative change event* occurs (whether or not the occurrence of that *negative change event* is notified by the provider to the *AER* under paragraph (f)) and the *AER* determines to impose a requirement on the provider in relation to that *negative change event* as described in paragraph (b), the *AER* must determine:

(1) the *required pass through amount*; and

(2) taking into account the matters referred to in paragraph (j):

(i) how much of that *required pass through amount* should be passed through to *Distribution Network Users* (the *negative pass through amount*); and

(ii) the amount of that *negative pass through amount* that should be passed through to *Distribution Network Users* in each *regulatory year* during the *regulatory control period*.

(h) A *Distribution Network Service Provider* must provide the *AER* with such information as the *AER* requires for the purpose of making a determination under paragraph (g) within the time specified by the *AER* in a notice provided to the provider by the *AER* for that purpose.

Consultation

(i) Before making a determination under paragraph (d) or (g), the *AER* may consult with the relevant *Distribution Network Service Provider* and such

other persons as the *AER* considers appropriate, on any matters arising out of the relevant *pass through event* the *AER* considers appropriate.

Relevant factors

(j) In making a determination under paragraph (d) or (g) in respect of a *Distribution Network Service Provider*, the *AER* must take into account:

(1) the matters and proposals set out in any statement given to the *AER* by the provider under paragraph (c) or (f); and

(2) in the case of a *positive change event*, the increase in costs in the provision of *standard control services* that the provider has incurred and is likely to incur until the end of the *regulatory control period* as a result of the *positive change event*; and

(3) in the case of a *positive change event*, the efficiency of the provider's decisions and actions in relation to the risk of the *positive change event*, including whether the provider has failed to take any action that could reasonably be taken to reduce the magnitude of the *eligible pass through amount* in respect of that *positive change event* and whether the provider has taken or omitted to take any action where such action or omission has increased the magnitude of the amount in respect of that *positive change event*; and

(4) the time cost of money based on the *weighted average cost of capital* for the provider for the relevant *regulatory control period*; and

(5) the need to ensure that the provider only recovers any actual or likely increment in costs under this paragraph (j) to the extent that such increment is solely as a consequence of a *pass through event*; and

(6) in the case of a *tax change event*, any change in the way another *tax* is calculated, or the removal or imposition of another *tax*, which, in the *AER*'s opinion, is complementary to the *tax change event* concerned; and

(7) whether the costs of the *pass through event* have already been factored into the calculation of the provider's *annual revenue requirement*; and

(8) any other factors the *AER* considers relevant.

Extension of time limits

(k) The *AER* must, by written notice to a *Distribution Network Service Provider*, extend a time limit fixed in clause 6.6.1(c) or clause 6.6.1(f) if the *AER* is satisfied that the difficulty of assessing or quantifying the effect of the relevant *pass through event* justifies the extension.

Contributions to Climate Change Fund (NSW)

(l) Neither a requirement by an order under the Energy and Utilities Administration Act 1987 of New South Wales to make a payment to the Climate Change Fund established under that Act, nor the making of a payment to that Fund, is a *pass through event* in relation to a NSW Distribution Network Service Provider, but the amount is recoverable in the following *regulatory year* under clause 6.18.2(b)(5A).

6.6.2 Service target performance incentive scheme

(a) The *AER* may develop and *publish* an incentive scheme or incentive schemes (*service target performance incentive scheme*) to provide incentives (which may include targets) for *Distribution Network Service Providers* to maintain and improve performance.

(b) In developing and implementing a *service target performance incentive scheme*, the *AER*:

(1) must consult with the authorities responsible for the administration of relevant *jurisdictional electricity legislation*; and

(2) must ensure that service standards and service targets (including guaranteed service levels) set by the scheme do not put at risk the *Distribution Network Service Provider's* ability to comply with relevant service standards and service targets (including guaranteed service levels) as specified in *jurisdictional electricity legislation*; and

Note:

A service target performance incentive scheme operates concurrently with any average or minimum service standards and guaranteed service level schemes that apply to the Distribution Network Service Provider under jurisdictional electricity legislation.

(3) must take into account:

(i) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(ii) any *regulatory obligation or requirement* to which the *Distribution Network Service Provider* is subject; and

(iii) the past performance of the *distribution network*; and

(iv) any other incentives available to the *Distribution Network Service Provider* under the *Rules* or a relevant distribution determination; and

(v) the need to ensure that the incentives are sufficient to offset any financial incentives the service provider may have to reduce costs at the expense of service levels; and

(vi) the willingness of the customer or end user to pay for improved performance in the delivery of services; and

(vii) the possible effects of the scheme on incentives for the implementation of non-network alternatives.

(c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.

(d) The *AER* must *publish* a written statement, when it *publishes* its first *service target performance incentive scheme* (if any), setting out how it proposes the *service target performance incentive scheme* will operate for the next distribution determination. The statement may be included in the first *service target performance incentive scheme* or may be *published* separately.

(e) However, despite *publishing* a *service target performance incentive scheme*, the *AER* need not apply the scheme to one or more *Distribution Network Service Providers* in the relevant distribution determination or determinations.

(f) The *AER* may carry out such consultation in connection with the preparation of a *service target performance incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

(g) If a *service target performance incentive scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *service target performance incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.

(h) The *AER* must monitor and collect information from any or all of the NSW and ACT Distribution Network Service Providers on matters relevant to be included in a *service target performance incentive scheme* for the purpose of developing, amending or applying a *service target performance incentive scheme* for the *regulatory control period* commencing on 1 July 2014.

(i) The *AER* may, in connection with the application of a *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services provided in the regulatory control period 2009-2014, adopt relevant provisions of the *service target performance incentive scheme* prepared and *published* by the *AER* under Chapter 6A so far as it is applicable to the service.

(j) A *service target performance incentive scheme* applying to EnergyAustralia in respect of EnergyAustralia prescribed (transmission) standard control services should ensure that the maximum revenue increment or decrement as a result of the operation of the *service target performance incentive scheme* will fall within a range that is between 1% and 5% of the maximum allowed revenue for the relevant *regulatory year*.

(k) A *service target performance incentive scheme* applying to the ACT Distribution Network Service Provider must not, without the agreement of the provider, confer financial rewards or impose financial penalties on the provider for the regulatory control period 2009-2014, but this paragraph does not affect the operation of paragraph (h).

Note:

A Distribution Network Service Provider is not precluded from entering into a contract with a third party (such as a network support service provider) under which the benefits of a service target performance incentive scheme are passed on to the third party, or the third party is required to indemnify the provider for penalties to which the provider becomes liable under the scheme.

6.6.3 Demand management incentive scheme

(a) The *AER* may develop and *publish* an incentive scheme or schemes (*demand management incentive scheme*) to provide incentives for *Distribution Network Service Providers* to implement efficient non-network alternatives or to manage the expected demand for *standard control services* in some other way.

(b) In developing and implementing a *demand management incentive scheme*, the *AER* must have regard to:

(1) the need to ensure that benefits to consumers likely to result from the scheme are sufficient to warrant any reward or penalty under the scheme for *Distribution Network Service Providers*; and

(2) the effect of a particular control mechanism (i.e. price – as distinct from revenue – regulation) on a *Distribution Network Service*

Provider's incentives to adopt or implement efficient non-network alternatives; and

(3) the extent the *Distribution Network Service Provider* is able to offer efficient pricing structures; and

(4) the possible interaction between a *demand management incentive scheme* and other incentive schemes; and

(5) the willingness of the customer or end user to pay for increases in costs resulting from implementation of the scheme.

(c) The *AER* may, from time to time and with the agreement of each affected *Distribution Network Service Provider*, amend or replace any scheme that is developed and *published* under this clause.

(d) Nothing in this clause limits the content of an *efficiency benefit sharing scheme*.

(e) The *AER* must *publish* a written statement, when it *publishes* its first *demand management incentive scheme* (if any), setting out how it proposes the *demand management incentive scheme* will operate for the next distribution determination. The statement may be included in the first *demand management incentive scheme* or may be *published* separately.

(f) The *AER* may carry out such consultation in connection with the preparation of the *demand management incentive scheme* as the *AER* thinks appropriate and may take into consideration any consultation carried out before the commencement date.

(g) If a *demand management incentive scheme* applicable to a NSW or ACT Distribution Network Service Provider is not *published* by the *AER* before 1 March 2008 or the date that is one month after the commencement date (whichever is the later), no *demand management incentive scheme* may be applied to the *Distribution Network Service Provider* in its distribution determination for the regulatory control period 2009-2014.

(h) Nothing in this clause affects the application of the D-factor carry forward referred to in clause 6.4.3(a)(8) and clause 6.4.3(b)(8).

Part D EnergyAustralia negotiated distribution services

6.7 Negotiated distribution services

This rule applies only to EnergyAustralia negotiated distribution services.

6.7.1 Principles relating to access to negotiated distribution services

The following principles constitute the *Negotiated Distribution Service Principles*:

(1) the price for a *negotiated distribution service* should be based on the costs incurred in providing that service, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;

(2) subject to subparagraphs (3) and (4), the price for a *negotiated distribution service* should be at least equal to the cost that would be avoided by not providing the service but no more than the cost of providing it on a stand alone basis;

(3) if the *negotiated distribution service* is the provision of a *shared distribution service* that:

(i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or

(ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

(4) if the *negotiated distribution service* is the provision of a *shared distribution service* that does not meet (and does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1, the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;

(5) the price for a *negotiated distribution service* must be the same for all *Distribution Network User*s unless there is a material difference in the costs of providing the *negotiated distribution service* to different *Distribution Network User*s or classes of *Distribution Network User*s;

(6) the price for a *negotiated distribution service* should be subject to adjustment over time to the extent that the assets used to provide that service are subsequently used to provide services to another person, in

which case the adjustment should reflect the extent to which the costs of that asset are being recovered through charges to that other person;

(7) the price for a *negotiated distribution service* should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the *negotiated distribution service*;

(8) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, in the case of compensation referred to in rule 5.4A(h) to (j), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;

(9) the *terms and conditions of access* for a *negotiated distribution service* should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a *negotiated distribution service* is to be treated as being fair and reasonable if it complies with principles (1) to (7) of this clause;

(10) the *terms and conditions of access* for a *negotiated distribution service* (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the *negotiated distribution service* and the costs to the *Distribution Network Service Provider* of providing the *negotiated distribution service*;

(11) the *terms and conditions of access* for a *negotiated distribution service* should take into account the need for the service to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

6.7.2 Determination of terms and conditions of access for negotiated distribution services

(a) A *Distribution Network Service Provider* must comply with:

(1) the provider's *negotiating framework*; and

(2) the provider's *Negotiated Distribution Service Criteria*,

when the provider is negotiating the terms and conditions of access to *negotiated distribution services*.

(b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:

(1) rules 5.3 and 5.4A, when negotiating for the provision of *connection services* and the associated *connection service* charges; and

(2) rule 5.4A when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

6.7.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7.4 Negotiated Distribution Service Criteria determination

(a) The determination by the *AER* specifying the *Negotiated Distribution Service Criteria* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:

(1) by the provider in negotiating *terms and conditions of access* including:

(i) the prices that are to be charged for the provision of *negotiated distribution services* by the provider for the relevant *regulatory control period*; or

(ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and

(2) by the *AER* in resolving an access dispute about *terms and conditions of access* including:

(i) the price that is to be charged for the provision of a *negotiated distribution service* by the provider; or

(ii) any *access charges* that are to be paid to or by the provider.

(b) The *Negotiated Distribution Service Criteria* must give effect to and be consistent with the *Negotiated Distribution Service Principles* set out in clause 6.7.1.

6.7.5 Preparation of and requirements for negotiating framework for negotiated distribution services

(a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to receive a *negotiated distribution service* from the provider, as to the *terms and conditions of access* for the provision of the service.

(b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:

(1) the applicable requirements of the relevant distribution determination; and

Note:

See clause 6.7.3.

(2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

(c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:

(1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a *negotiated distribution service*; and

(2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the *negotiated distribution service*, including the cost information described in subparagraph (3); and

(3) a requirement for the provider:

(i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the *negotiated distribution service*; and

(ii) to demonstrate to a *Service Applicant* that the charges for providing the *negotiated distribution service* reflect those costs and/or the cost increment or decrement (as appropriate); and

(iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made; and

Note:

If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed maximum demand, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's load profile where a reduction or increase in maximum demand has been demonstrated.

(4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the *negotiated distribution service*; and

(5) a requirement that negotiations with a *Service Applicant* for the provision of the *negotiated distribution service* be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and

(6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of *negotiated distribution services* are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and

(7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the *negotiated distribution service*; and

(8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network User*s of the provision of the *negotiated distribution service*; and

(9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network User*s and ensure that the provision of *negotiated distribution services* does not result in non-compliance with obligations in relation to other *Distribution Network User*s under the *Rules*; and

(10) a requirement that the *Distribution Network Service Provider publish* the results of negotiations on its website.

(d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of Rules 5.3 and 5.4A and other relevant provisions of this Chapter 6 and Chapter 6A and, in the event of any inconsistency, those requirements prevail.

(e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a *negotiated distribution service* by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

6.7.6 Confidential information

(a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7.5(c)(2):

(1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and

(2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider* .

(b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7.5(c)(4):

(1) does not include *confidential information* provided to a *Service Applicant* by another person; and

(2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part DA Negotiable components of direct control services (NSW and ACT)

6.7A Negotiable components of direct control services

(a) The *AER* may include in a *Distribution Network Service Provider's* distribution determination a decision that one or more components of the provider's *direct control services* are negotiable components.

(b) A negotiable component may be a particular component of the *direct control service* or may relate to the terms or conditions on which a *direct control service* or a component of a *direct control service* is provided.

(c) A reference in this rule 6.7A to the price for a negotiable component of a *direct control service* is a reference to the price for the *direct control service* if the negotiable component is successfully negotiated by the *Distribution Network Service Provider* and the S*ervice Applicant* concerned.

(d) The following provisions of Rule 6.7A have effect if the *AER* decides that one or more components of *direct control services* provided by a *Distribution Network Service Provider* are negotiable components (as referred to in paragraph (a)).

6.7A.1 Principles relating to access to negotiable components

The following principles constitute the negotiable component principles:

(1) the price for a negotiable component should be the price for that component in the *Distribution Network Service Provider's approved pricing proposal*, unless the terms and conditions sought for the component are so different from those used for the purposes of establishing the *approved pricing proposal* as to warrant determination of the price without regard to this subparagraph;

(2) subject to subparagraph (1), the price for a negotiable component should be based on the costs incurred in providing that component, determined in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*;

(3) subject to subparagraphs (1), (4) and (5), the price for a negotiable component should be at least equal to the cost that would be avoided by not providing it but no more than the cost of providing it on a stand alone basis;

(4) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that:

(i) exceeds the *network* performance requirements (if any) which that *shared distribution service* is required to meet under any *jurisdictional electricity legislation*; or

(ii) exceeds the *network* performance requirements set out in schedules 5.1a and 5.1,

then the differential between the price for that *direct control service* and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements under any *jurisdictional electricity legislation* or as set out in schedules 5.1a and 5.1 (as the case may be) should reflect the increase in the *Distribution Network Service Provider's* incremental cost of providing that service;

(5) subject to subparagraph (1), if the *direct control service* of which the negotiable component is a component is the provision of a *shared distribution service* that does not meet (and does not exceed) the

network performance requirements set out in schedules 5.1a and 5.1, then the differential between the price for that service and the price for the *shared distribution service* which meets (but does not exceed) the *network* performance requirements set out in schedules 5.1a and 5.1 should reflect the cost the *Distribution Network Service Provider* would avoid by not providing that service;

(6) subject to subparagraph (1), the price for a negotiable component must be the same for all *Distribution Network User*s unless there is a material difference in the costs of providing the negotiable component to different *Distribution Network User*s or classes of *Distribution Network User*s;

(7) subject to subparagraph (1), the price for a negotiable component should be subject to adjustment over time to the extent that the assets used to provide the *direct control service* are subsequently used to provide services to another person, in which case the adjustment should reflect the extent to which the costs of those assets are being recovered through charges to that other person;

(8) subject to subparagraph (1), the price for a negotiable component should be such as to enable the *Distribution Network Service Provider* to recover the efficient costs of complying with all *regulatory obligations or requirements* associated with the provision of the negotiable component;

(9) any *access charges* should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing d*istribution network user access* and, in the case of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs;

(10) the *terms and conditions of access* for a negotiable component should be fair and reasonable and consistent with the safe and reliable operation of the *power system* in accordance with the *Rules* (for these purposes, the price for a negotiable component is to be treated as being fair and reasonable if it complies with principles (1) to (8) of this clause);

(11) the *terms and conditions of access* for a negotiable component (including, in particular, any exclusions and limitations of liability and indemnities) must not be unreasonably onerous taking into account the allocation of risk between the *Distribution Network Service Provider* and the other party, the price for the negotiable component and the costs to the *Distribution Network Service Provider* of providing the negotiable component; and

(12) the *terms and conditions of access* for a negotiable component should take into account the need for the *direct control service* to be provided in a manner that does not adversely affect the safe and reliable operation of the *power system* in accordance with the *Rules*.

6.7A.2 Determination of terms and conditions of access for negotiable components

(a) A *Distribution Network Service Provider* must comply with:

(1) the provider's *negotiating framework*; and

(2) the provider's negotiable component criteria,

when the provider is negotiating the *terms and conditions of access* to negotiable components.

(b) The *Distribution Network Service Provider* must also comply with any other applicable requirements of the *Rules*, including the requirements of:

(1) rules 5.3, 5.4A and 5.5, when negotiating for the provision of *connection services* and the associated *connection service* charges; and

(2) rules 5.4A and 5.5 when negotiating the *use of system services charges* and *access charges* to be paid to or by a *Distribution Network User*.

6.7A.3 Negotiating framework determination

The determination specifying requirements relating to the *negotiating framework* forming part of a distribution determination for a *Distribution Network Service Provider* is to set out requirements that are to be complied with in respect of the preparation, replacement, application or operation of its *negotiating framework*.

6.7A.4 Negotiable component criteria determination

(a) The determination by the *AER* specifying the negotiable component criteria forming part of a distribution determination for a *Distribution Network Service Provider* is to set out the criteria that are to be applied:

(1) by the provider in negotiating *terms and conditions of access* including:

(i) the variations to the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider for the relevant *regulatory control period*; and

(ii) any *access charges* which are negotiated by the provider during that *regulatory control period*; and

(2) by the *AER* in resolving an access dispute, between the *Distribution Network Service Provider* and a person who wishes to be provided with a negotiable component, in relation to *terms and conditions of access* including:

(i) the variation of the prices that are to be charged for the provision of the negotiable component of the *direct control service* concerned by the provider; and

(ii) any *access charges* that are to be paid to or by the provider.

(b) The negotiable component criteria must give effect to and be consistent with the principles set out in clause 6.7A.1.

6.7A.5 Preparation of and requirements for negotiating framework

(a) A *Distribution Network Service Provider* must prepare a document (the *negotiating framework*) setting out the procedure to be followed during negotiations between that provider and any person (the *Service Applicant* or applicant) who wishes to be provided with a negotiable component from the provider, as to the *terms and conditions of access* for the provision of the component.

(b) The *negotiating framework* for a *Distribution Network Service Provider* must comply with and be consistent with:

(1) the applicable requirements of a distribution determination applying to the provider; and

(2) paragraph (c), which sets out the minimum requirements for a *negotiating framework*.

(c) The *negotiating framework* for a *Distribution Network Service Provider* must specify:

(1) a requirement for the provider and a *Service Applicant* to negotiate in good faith the *terms and conditions of access* to a negotiable component; and

(2) a requirement for the provider to provide all such commercial information a *Service Applicant* may reasonably require to enable that applicant to engage in effective negotiation with the provider for the provision of the negotiable component, including the cost information described in subparagraph (3); and

(3) a requirement for the provider:

(i) to identify and inform a *Service Applicant* of the reasonable costs and/or the increase or decrease in costs (as appropriate) of providing the negotiable component; and

(ii) to demonstrate to a *Service Applicant* that the charges for providing the negotiable component reflect those costs and/or the cost increment or decrement (as appropriate); and

(iii) to have appropriate arrangements for assessment and review of the charges and the basis on which they are made;

Note:

If (for example) a charge, or an element of a charge, is based on a customer's actual or assumed maximum demand, the assessment and review arrangements should allow for a change to the basis of the charge so that it more closely reflects the customer's load profile where a reduction or increase in maximum demand has been demonstrated.

(4) a requirement for a *Service Applicant* to provide all commercial information the provider may reasonably require to enable the provider to engage in effective negotiation with that applicant for the provision of the negotiable component; and

(5) a requirement that negotiations with a *Service Applicant* for the provision of the negotiable component be commenced and finalised within specified periods and a requirement that each party to the negotiations must make reasonable endeavours to adhere to the specified time limits; and

(6) a process for dispute resolution which provides that all disputes as to the *terms and conditions of access* for the provision of negotiable components are to be dealt with in accordance with the relevant provisions of the Law and the *Rules* for dispute resolution; and

(7) the arrangements for payment by a *Service Applicant* of the provider's reasonable direct expenses incurred in processing the application to provide the negotiable component; and

(8) a requirement that the *Distribution Network Service Provider* determine the potential impact on other *Distribution Network User*s of the provision of the negotiable component; and

(9) a requirement that the *Distribution Network Service Provider* must notify and consult with any affected *Distribution Network User*s and ensure that the provision of negotiable components does not result in non-compliance with obligations in relation to other *Distribution Network User*s under the *Rules*; and

(10) a requirement that the *Distribution Network Service Provider publish* the results of negotiations on its website.

(d) Notwithstanding the foregoing, the *negotiating framework* must not be inconsistent with any of the requirements of Rules 5.3, 5.4A and 5.5 and other relevant provisions of this Chapter 6 and Chapter 6A and, in the event of any inconsistency, those requirements prevail.

(e) Each *Distribution Network Service Provider* and *Service Applicant* who is negotiating for the provision of a negotiable component by the provider must comply with the requirements of the *negotiating framework* in accordance with its terms.

(f) EnergyAustralia may prepare and submit a document that contains both the *negotiating framework* under this clause 6.7A.5 and the *negotiating framework* under clause 6.7.5, and both frameworks may be combined in a single framework.

6.7A.6 Confidential information

(a) Commercial information to be provided to a *Service Applicant* in accordance with clause 6.7A.5(c)(2):

(1) does not include *confidential information* provided to the *Distribution Network Service Provider* by another person; and

(2) may be provided subject to a condition that the *Service Applicant* must not provide any part of that commercial information to any other person without the consent of the *Distribution Network Service Provider* .

(b) Commercial information to be provided to a *Distribution Network Service Provider* in accordance with clause 6.7A.5(c)(4):

(1) does not include *confidential information* provided to a *Service Applicant* by another person; and

(2) may be provided subject to a condition that the provider must not provide any part of that commercial information to any other person without the consent of the *Service Applicant*.

Part E Regulatory proposal

6.8 Regulatory proposal

6.8.1 *****

6.8.2 Submission of regulatory proposal

(a) A *Distribution Network Service Provider* must, whenever required to do so under paragraph (b), submit a *regulatory proposal* to the *AER* for *distribution services* provided by means of, or in connection with, the provider's *distribution system*.

(b) A *regulatory proposal* must be submitted on or before 2 June 2008.

(c) A *regulatory proposal* must include (but need not be limited to) the following elements:

(1) *****

(2) for *direct control services* classified as *standard control services* – a *building block proposal*; and

(3) *****

(3A) for *direct control services* classified as *alternative control services*:

(i) the proposed control mechanism, a demonstration of the application of the proposed control mechanism, and the necessary supporting information; and

(ii) in the case of a departure from the *AER's* likely approach to the relevant control mechanisms for *alternative control services* (as indicated in a statement *published* under clause 6.2.5(e)) a statement of the reasons justifying the departure; and

(4) for *direct control services* – indicative prices for each year of the *regulatory control period*; and

(5) *****

(6) an indication of the parts of the proposal (if any) the *Distribution Network Service Provider* claims to be confidential and wants suppressed from publication on that ground; and

(7) for *direct control services* – a proposal as to whether any (and, if so, which) components of *direct control services* should be negotiable components; and

(8) for negotiable components of *direct control services* classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*; and

(9) for EnergyAustralia prescribed (transmission) standard control services - a proposed pricing methodology; and

(10) for EnergyAustralia negotiated distribution services classified under the proposal as *negotiated distribution services* – the proposed *negotiating framework*.

(d) The *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by any relevant *regulatory information instrument*.

(e) *****

(f) *****

6.9 Preliminary examination and consultation

6.9.1 Preliminary examination

(a) If the *AER* considers that a *regulatory proposal* (or the accompanying information) does not comply, in any respect, with a requirement of the Law or the *Rules*, the *AER* may notify the provider that it requires resubmission of the proposal.

(b) The notice must be given as soon as practicable and must state why, and in what respects, the *AER* considers the *regulatory proposal* to be non-compliant.

6.9.2 Resubmission of proposal

(a) A *Distribution Network Service Provider* must, within 20 *business days* after receiving a notice under clause 6.9.1, resubmit its *regulatory proposal* in an amended form that complies with the relevant requirements set out in the notice.

(b) A *Distribution Network Service Provider* may only make changes to its *regulatory proposal* to address the deficiencies identified in the notice.

6.9.3 Consultation

(a) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted or resubmitted to it by the *Distribution Network Service Provider* under this Part, together with:

(1) the *AER*'s proposed negotiable component criteria for the provider; and

(1A) in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia - the *AER's* proposed *Negotiated Distribution Service Criteria*; and

(2) an invitation for written submissions on the *regulatory proposal* and the proposed *Negotiated Distribution Service Criteria* or proposed negotiable component criteria (or both),

after the *AER* decides that the *regulatory proposal* complies (or that there is sufficient compliance) with the requirements of the Law and the *Rules*.

(b) The *AER* may *publish* an issues paper examining issues related to the *regulatory proposal* and the proposed negotiable component criteria (and, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria),* at the same time as, or subsequent to, *publication* of the invitation referred to in paragraph (a)(2).

(c) Any person may make a written submission to the *AER* on the *regulatory proposal* or the proposed negotiable component criteria (or, in the case of EnergyAustralia negotiated distribution services provided by EnergyAustralia, the proposed *Negotiated Distribution Service Criteria*) within the time specified in the invitation referred to in paragraph (a)(2), which must be not earlier than 30 *business days* after the invitation for submissions is *published* under that paragraph.

6.10 Draft distribution determination and further consultation

6.10.1 Making of draft distribution determination

Subject to rule 6.14(a), the *AER* must consider any written submissions made under rule 6.9 and must make a draft distribution determination in relation to the *Distribution Network Service Provider*.

6.10.2 Publication of draft determination and consultation

(a) The *AER* must *publish*:

(1) the draft distribution determination; and

(2) notice of the making of the draft distribution determination; and

(3) the *AER*'s reasons for suggesting that the distribution determination should be made as proposed including the draft constituent decisions

i.e. the decisions made in accordance with rule 6.12 on which the draft distribution determination is predicated; and

(4) notice of a predetermination conference; and

(5) an invitation for written submissions on its draft distribution determination.

(b) The *AER* must hold a predetermination conference at the time, date and place specified in the notice under paragraph (a)(4) for the purpose of explaining the draft distribution determination and receiving oral submissions from interested parties. Any person may attend such a predetermination conference but the procedure to be adopted at the conference will be at the discretion of the senior *AER* representative in attendance.

(c) Any person may make a written submission to the *AER* on the draft distribution determination within the time specified in the invitation referred to in paragraph (a)(5), which must be not earlier than 30 *business days* after the making of the draft determination.

6.10.3 Submission of revised proposal

(a) In addition to making written submissions, the *Distribution Network Service Provider* may, not more than 30 *business days* after the publication of the draft distribution determination, submit a revised *regulatory proposal* to the *AER*.

(b) A *Distribution Network Service Provider* may only make the revisions referred to in paragraph (a) so as to incorporate the substance of any changes required to address matters raised by the draft distribution determination or the *AER*'s reasons for it.

(c) A revised *regulatory proposal* must comply with the requirements of, and must contain or be accompanied by the information required by, any relevant *regulatory information instrument*.

(d) Subject to the provisions of the Law and the *Rules* about the disclosure of *confidential information*, the *AER* must *publish* a *regulatory proposal* submitted by the *Distribution Network Service Provider* under paragraph (a), together with the accompanying information, as soon as practicable after receipt by the *AER*.

(e) The *AER* may, but need not, invite written submissions on the revised *regulatory proposal*.

6.11 Distribution determination

6.11.1 Making of distribution determination

Subject to rule 6.14(a), the *AER* must consider any submissions made on the draft distribution determination, or on any revised *regulatory proposal* submitted to it under clause 6.10.3, and must make a distribution determination in relation to the *Distribution Network Service Provider*.

6.11.2 Notice of distribution determination

The *AER* must as soon as practicable, but not later than 2 months before the commencement of the relevant *regulatory control period*, *publish*:

(1) notice of the making of the distribution determination; and

(2) the distribution determination itself; and

(3) the *AER*'s reasons for making the distribution determination in its final form including the constituent decisions i.e. the decisions made in accordance with rule 6.12 on which the distribution determination is predicated.

6.11.3 Commencement of distribution determination

(a) A distribution determination takes effect at the commencement of the *regulatory control period* to which it relates.

(b) If a period intervenes between the end of one *regulatory control period* and the commencement of a new distribution determination providing for the next *regulatory control period*:

(1) the previous distribution determination continues in force during the intervening period; and

(2) the last pricing proposal approved by the IPART or ICRC, as the case requires, in the previous *regulatory control period* continues in force (despite any contrary provision of these *Rules*) during the intervening period and the first *regulatory year* of the *regulatory control period*; and

(3) the later distribution determination is to make provision for appropriate adjustments to the *approved pricing proposals* for subsequent *regulatory years* of the *regulatory control period*.

6.12 Requirements relating to draft and final distribution determinations

6.12.1 Constituent decisions

A distribution determination is predicated on the following decisions by the *AER* (*constituent decisions*):

(1) a decision on the classification of the services to be provided by the *Distribution Network Service Provider* during the course of the *regulatory control period*;

(2) a decision on the *Distribution Network Service Provider's* current *building block proposal* in which the *AER* either approves or refuses to approve:

(i) the *annual revenue requirement* for the provider, as set out in the *building block proposal*, for each *regulatory year* of the *regulatory control period*; and

(ii) *****

(3) a decision in which the *AER* either:

(i) acting in accordance with clause 6.5.7(c), accepts the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*; or

(ii) acting in accordance with clause 6.5.7(d), does not accept the total of the forecast capital expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that decision and an estimate of the total of the *Distribution Network Service Provider's* required capital expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *capital expenditure criteria*, taking into account the *capital expenditure factors*;

(4) a decision in which the *AER* either:

(i) acting in accordance with clause 6.5.6(c), accepts the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*; or

(ii) acting in accordance with clause 6.5.6(d), does not accept the total of the forecast operating expenditure for the *regulatory control period* that is included in the current *building block proposal*, in which case the *AER* must set out its reasons for that

decision and an estimate of the total of the *Distribution Network Service Provider's* required operating expenditure for the *regulatory control period* that the *AER* is satisfied reasonably reflects the *operating expenditure criteria*, taking into account the *operating expenditure factors*;

(5) a decision in relation to the rate of return in accordance with clause 6.5.2;

(6) a decision on the regulatory asset base as at the commencement of the *regulatory control period* in accordance with clause 6.5.1 and schedule 6.2;

(7) a decision on the estimated cost of corporate income tax to the provider for each *regulatory year* of the *regulatory control period* in accordance with clause 6.5.3;

(8) a decision on whether or not to approve the depreciation schedules submitted by the *Distribution Network Service Provider* and, if the *AER* decides against approving them, a decision determining depreciation schedules in accordance with clause 6.5.5(b);

(9) a decision on how any applicable *efficiency benefit sharing scheme*, *service target performance incentive scheme*, or *demand management incentive scheme* is to apply to the *Distribution Network Service Provider*;

(10) a decision in which the *AER* decides other appropriate amounts, values or inputs;

(11) a decision on the control mechanism (including the X factor) for *standard control services*;

(12) a decision on the control mechanism for *alternative control services*;

(13) a decision on how compliance with a relevant control mechanism is to be demonstrated;

(14) a decision on the additional *pass through events* that are to apply for the *regulatory control period*;

(15) a decision on any *negotiating framework* that is to apply to the *Distribution Network Service Provider* for the *regulatory control period* (which may be the *negotiating framework* as proposed by the provider, some variant of it, or a framework substituted by the *AER*);

(16) if relevant, a decision in which the *AER* decides the *Negotiated Distribution Service Criteria* for the *Distribution Network Service Provider*;

(16A) a decision in which the *AER* decides which, if any, components of *direct control services* are negotiable components;

(16B) if relevant, a decision in which the *AER* decides the negotiable component criteria for the *Distribution Network Service Provider*;

(17) a decision on the procedures for assigning customers to *tariff classes*, or reassigning customers from one *tariff class* to another (including any applicable restrictions);

(18) a decision on whether depreciation for establishing the regulatory asset base as at the commencement of the following *regulatory control period* is to be based on actual or forecast capital expenditure;

(19) a decision on how the *Distribution Network Service Provider* is to report to the *AER* on its recovery of *Transmission Use of System* charges for each *regulatory year* of the *regulatory control period* and on the adjustments to be made to subsequent *pricing proposals* to account for over or under recovery of those charges;

(20) for EnergyAustralia prescribed (transmission) standard control services – a decision on the proposed pricing methodology, in which the *AER* either approves or refuses to approve that methodology and sets out reasons for its decision.

6.12.1A Division of EnergyAustralia's revenue

(a) The *AER* must, in the distribution determination for EnergyAustralia, divide the revenue calculated under Part C into the following two portions:

(1) a portion relevant to EnergyAustralia prescribed (transmission) standard control services;

(2) a portion relevant to other *standard control services* provided by EnergyAustralia,

based on EnergyAustralia's approved Cost Allocation Method.

(b) The pricing rules in Part J of Chapter 6A are to be applied to the portion referred to in paragraph (a)(1) instead of the pricing rules in Part I of transitional Chapter 6.

(c) The pricing rules in Part I of transitional Chapter 6 are to be applied to the portion referred to in paragraph (a)(2).

6.12.2 Reasons for decisions

The reasons given by the *AER* for a draft distribution determination under rule 6.10 or a final distribution determination under rule 6.11 must set out the basis and rationale of the determination, including:

(1) details of the qualitative and quantitative methods applied in any calculations and formulae made or used by the *AER*; and

(2) the values adopted by the *AER* for each of the input variables in any calculations and formulae, including:

(i) whether those values have been taken or derived from the provider's current *building block proposal*; and

(ii) if not, the rationale for the adoption of those values; and

(3) details of any assumptions made by the *AER* in undertaking any material qualitative and quantitative analyses; and

(4) reasons for the making of any decisions, the giving or withholding of any approvals, and the exercise of any discretions, as referred to in this Chapter 6, for the purposes of the determination.

6.12.3 Extent of AER's discretion in making distribution determinations

(a) Subject to this clause and other provisions of this Chapter 6 explicitly negating or limiting the *AER*'s discretion, the *AER* has a discretion to accept or approve, or to refuse to accept or approve, any element of a *regulatory proposal*.

(b) *****

(c) *****

(d) The *AER* must approve the *total revenue requirement* for a *Distribution Network Service Provider* for a *regulatory control period*, and the *annual revenue requirement* for each *regulatory year* of the *regulatory control period*, as set out in the provider's current *building block proposal*, if the *AER* is satisfied that those amounts have been properly calculated using the *post-tax revenue model* on the basis of amounts calculated, determined or forecast in accordance with the requirements of Part C of this Chapter 6.

(e) *****

(f) If the *AER* refuses to approve an amount, value or methodology referred to in clause 6.12.1, the substitute amount, value or methodology on which the distribution determination is based must be:

(1) determined on the basis of the current *regulatory proposal*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

(g) The *AER* must approve a proposed *negotiating framework* if the *AER* is satisfied that it adequately complies with the requirements of Part D or DA (as the case requires).

(h) If the *AER* refuses to approve a proposed *negotiating framework*, any approved amended *negotiating framework* must be:

(1) determined on the basis of the current proposed *negotiating framework*; and

(2) amended from that basis only to the extent necessary to enable it to be approved in accordance with the *Rules*.

(i) The *AER* must approve EnergyAustralia's proposed pricing methodology for EnergyAustralia prescribed (transmission) standard control services if the *AER* is satisfied that the methodology:

(1) gives effect to and is consistent with the *Pricing Principles for Prescribed Transmission Services*; and

(2) complies with the requirements of the *pricing methodology guidelines*.

6.13 Revocation and substitution of distribution determination for wrong information or error

(a) The *AER* may (but is not required to) revoke a distribution determination during a *regulatory control period* if it appears to the *AER* that the determination is affected by a material error or deficiency of one or more of the following kinds:

(1) a clerical mistake or an accidental slip or omission;

(2) a miscalculation or misdescription;

(3) a defect in form;

(4) a deficiency resulting from the provision of false or materially misleading information to the *AER*.

(b) If the *AER* revokes a distribution determination under paragraph (a), the *AER* must make a new distribution determination in substitution for the revoked determination to apply for the remainder of the *regulatory control period* for which the revoked determination was to apply.

(c) If the *AER* revokes a distribution determination under paragraph (a), the substituted determination must only vary from the revoked determination to the extent necessary to correct the relevant error or deficiency.

(d) The *AER* may only revoke and substitute a distribution determination under this rule 6.13, if it has first consulted with the relevant *Distribution Network Service Provider* and such other persons as it considers appropriate.

6.14 Miscellaneous

(a) The *AER* may, but is not required to, consider any submission made pursuant to an invitation for submissions after the time for making the submission has expired.

(b) Nothing in this Part E is to be construed as precluding the *AER* from *publishing* any issues, consultation and discussion papers, or holding any conferences and information sessions, that the *AER* considers appropriate.

(c) Subject to paragraph (d), as soon as practicable after the *AER* receives a submission in response to an invitation referred to in clause 6.9.3(a)(2) or 6.10.2(a)(5) (whether or not the submission was made before the time for making it has expired), the *AER* must *publish* that submission.

(d) The *AER* must not *publish* a submission referred to in paragraph (c) to the extent it contains information which has been clearly identified as confidential by the person making the submission.

(e) The *AER* may give such weight to *confidential information* identified in accordance with paragraph (d) in a submission as it considers appropriate, having regard to the fact that such information has not been made publicly available.

(f) Paragraph (d) does not apply to the extent that any other provision of the Law or the *Rules* permits or requires such information to be publicly released by the *AER*.

Part F Cost Allocation

6.15 Cost allocation

6.15.1 Duty to comply with Cost Allocation Method

(a) A *Distribution Network Service Provider* must comply with the Cost Allocation Method that has been approved in respect of that provider from time to time by the *AER* under this rule 6.15 in respect of the regulatory control period 2009-2014.

(b) A *Distribution Network Service Provider* is, during the regulatory control period 2009-2014, also subject to the requirements of Part F of general Chapter 6 but only for the purposes of and in connection with the distribution determination to be made for the subsequent *regulatory control period*.

6.15.2 *****

6.15.3 *****

6.15.4 *****

Provisions applicable to the NSW Distribution Network Service Providers

6.15.5 Cost Allocation Guidelines (NSW)

The Accounting Separation Code for Electricity Distributors in NSW prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to be Cost Allocation Guidelines made by the *AER* for the regulatory control period 2009-2014.

6.15.6 Cost Allocation Method (NSW)

(a) Each NSW Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.

(b) The Cost Allocation Method proposed by a NSW Distribution Network Service Provider must:

(1) give effect to and be consistent with the Cost Allocation Guidelines; and

(2) be prepared using, as far as practicable but subject to subparagraph (1), the same cost allocation method as it last used when preparing its regulatory accounts for submission to the IPART.

(c) The *AER* may approve or refuse to approve a Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:

(1) gives effect to and is consistent with the Cost Allocation Guidelines; and

(2) has been prepared, as far as practicable but subject to subparagraph (1), using the cost allocation method the relevant *Distribution Network Service Provider* last used when preparing its regulatory accounts for submission to the IPART.

(d) The *AER* must notify the relevant *Distribution Network Service Provider* of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.

(e) As part of giving any approval referred to in paragraph (c), the *AER* may, after consulting with the relevant *Distribution Network Service Provider*, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.

(f) A NSW Distribution Network Service Provider may, with the *AER's* approval, amend its Cost Allocation Method from time to time but:

(1) the amendment:

(i) may be approved on condition that the *Distribution Network Service Provider* agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and

(ii) if approved on such a condition, does not take effect unless and until the *Distribution Network Service Provider* notifies the *AER* of its agreement;

(2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the *Distribution Network Service Provider* within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.

(g) A NSW Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

Provisions applicable to the ACT Distribution Network Service Provider

6.15.7 Cost Allocation Principles (ACT)

The following principles constitute the Cost Allocation Principles for the ACT Distribution Network Service Provider:

(1) the detailed principles and policies used by the ACT Distribution Network Service Provider to allocate costs between different

categories of *distribution services* must be described in sufficient detail to enable the *AER* to replicate reported outcomes through the application of those principles and policies;

(2) the allocation of costs must be determined according to the substance of a transaction or event rather than its legal form;

(3) only the following costs may be allocated to a particular category of *distribution services*:

(i) costs which are directly attributable to the provision of those services; and

(ii) costs which are not directly attributable to the provision of those services but which are incurred in providing those services, in which case such costs must be allocated to the provision of those services using an appropriate allocator which should:

(A) except to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be causation based; and

(B) to the extent the cost is immaterial or a causal based method of allocation cannot be established without undue cost and effort, be an allocator that accords with a well accepted cost allocation method;

(4) any cost allocation method which is used, the reasons for using that method and the numeric quantity (if any) of the chosen allocator must be clearly described;

(5) the same cost must not be allocated more than once;

(6) the principles, policies and approach used to allocate costs must be consistent with the Distribution Ring-Fencing Guidelines;

(7) costs which have been allocated to a particular service cannot be reallocated to another service during the course of a *regulatory control period*.

6.15.8 Cost Allocation Method (ACT)

(a) The ACT Distribution Network Service Provider must submit to the *AER* for its approval a document setting out its proposed Cost Allocation Method for the regulatory control period 2009-2014 within 1 month after the commencement date.

(b) The Cost Allocation Method proposed by the ACT Distribution Network Service Provider must:

(1) be prepared using, as far as practicable, the same cost allocation method as it last used when preparing its regulatory accounts for submission to the ICRC; and

(2) subject to subparagraph (1), be consistent with the Cost Allocation Principles.

(c) The *AER* may approve or refuse to approve the Cost Allocation Method submitted under paragraph (a), but must approve it if the *AER* is satisfied that it:

(1) has been prepared, as far as practicable, using the cost allocation method the ACT Distribution Network Service Provider last used when preparing its regulatory accounts for submission to the ICRC; and

(2) subject to subparagraph (1), is consistent with the Cost Allocation Principles.

(d) The *AER* must notify the ACT Distribution Network Service Provider of its decision to approve or refuse to approve the Cost Allocation Method submitted to it under paragraph (a) within 2 months of its submission, failing which the *AER* will be taken to have approved it.

(e) As part of giving any approval referred to in paragraph (c), the AER may, after consulting with the ACT Distribution Network Service Provider, amend the Cost Allocation Method submitted to it, in which case the Cost Allocation Method as so amended will be taken to be approved by the *AER*.

(f) The ACT Distribution Network Service Provider may, with the *AER's* approval, amend its Cost Allocation Method from time to time but:

(1) the amendment:

(i) may be approved on condition that the provider agree to incorporate into the amendment specified additional changes to the Cost Allocation Method the *AER* reasonably considers necessary or desirable as a result of the amendment as submitted; and

(ii) if approved on such a condition, does not take effect unless and until the provider notifies the *AER* of its agreement;

(2) if 6 months elapse from the date of the submission of the amendment and the *AER* has not notified the provider within that period of its approval or refusal to approve the amendment, the amendment is, at the end of that period, conclusively presumed to have been unconditionally approved.

(g) The ACT Distribution Network Service Provider must maintain a current copy of its Cost Allocation Method on its website.

Part G *****

Part H Ring-Fencing Arrangements for Distribution Network Service Providers

6.17 Distribution Ring-Fencing Guidelines

6.17.1 Compliance with Distribution Ring-Fencing Guidelines

(a) All *Distribution Network Service Providers* must comply with the *Distribution Ring-Fencing Guidelines* prepared in accordance with clause 6.17.2.

(b) Any Distribution Ring-Fencing Guidelines prepared by the IPART and in force immediately before the start of the regulatory control period 2009-2014 in relation to the NSW Distribution Network Service Providers are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the NSW Distribution Network Service Providers.

(c) Any Distribution Ring-Fencing Guidelines prepared by the ICRC and in force immediately before the start of the regulatory control period 2009-2014 in relation to the ACT Distribution Network Service Provider are deemed to have been prepared by the *AER* under clause 6.17.2 and are to be complied with by the ACT Distribution Network Service Provider.

(d) Any waiver granted by the IPART under clause 6.2 of the Distribution Ring-Fencing Guidelines prepared by the IPART in relation to the regulatory control period 2004-2009 and in force at the end of that period is deemed to have been given by the *AER* in relation to the regulatory control period 2009-2014.

(e) For the purposes of paragraphs (b) and (c), the provisions of the guidelines prepared by the IPART and ICRC respectively and referred to in those paragraphs have effect as if references to the IPART and ICRC respectively were references to the *AER*, and with any other necessary modifications.

(f) EnergyAustralia must, in respect of the EnergyAustralia transmission support network, comply with the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.

(g) The guidelines referred to in paragraphs (b) and (c) continue in force during and after the end of the regulatory control period 2009-2014 subject to amendment, revocation or replacement by guidelines made under the new regulatory regime as defined in clause 11.14.2.

6.17.2 Development of Distribution Ring-Fencing Guidelines

(a) Subject to clause 6.17.1, guidelines may be developed by the *AER* for the accounting and functional separation of the provision of *direct control services* by *Distribution Network Service Providers* from the provision of other services by *Distribution Network Service Providers* (the *Distribution Ring-Fencing Guidelines*). The guidelines may vary in application as between different *participating jurisdiction*s.

Note:

Clause 11.14.5 will, subject to clause 6.17.1, have a bearing on the application of these guidelines in certain cases.

(b) The *Distribution Ring-Fencing Guidelines* may include, but are not limited to:

(1) provisions defining the need for and extent of:

(i) legal separation of the entity through which a *Distribution Network Service Provider* provides *network services* from any other entity through which it conducts business; and

(ii) the establishment and maintenance of consolidated and separate accounts for *standard control services, alternative control services* and other services provided by the *Distribution Network Service Provider*; and

(iii) allocation of costs between *standard control services*, *alternative control services* and other services provided by the *Distribution Network Service Provider*; and

(iv) limitations on the flow of information between the *Distribution Network Service Provider* and any other person; and

(v) limitations on the flow of information where there is the potential for a competitive disadvantage between those parts of the *Distribution Network Service Provider's* business which provide *direct control services* and parts of the provider's business which provide any other services; and

(2) provisions allowing the *AER* to add to or to waive a *Distribution Network Service Provider's* obligations under the *Distribution.Ring-Fencing Guidelines*.

(c) In developing or amending the *Distribution Ring-Fencing Guidelines* the *AER* must consider, without limitation, the need, so far as practicable, for consistency between the *Distribution Ring-Fencing Guidelines* and the *Transmission Ring-Fencing Guidelines*.

(d) In developing or amending the *Distribution Ring-Fencing Guidelines*, the *AER* must consult with *participating jurisdictions*, *Registered Participants*, *AEMO* and other *interested parties*, and such consultation must be otherwise in accordance with the *distribution consultation procedures* in Part G of general Chapter 6.

Part I Distribution Pricing Rules

6.18 Distribution Pricing Rules

6.18.1 Application of this Part

This Part applies to tariffs and *tariff classes* related to *direct control services*.

6.18.2 Pricing proposals

(a) A *Distribution Network Service Provider* must:

(1) submit to the *AER*, as soon as practicable, and in any case within 15 *business days*, after *publication* of the distribution determination, a *pricing proposal* (the "initial *pricing proposal*") for the first *regulatory year* of the *regulatory control period*; and

(2) submit to the *AER*, at least 2 months before the commencement of the second and each subsequent *regulatory year* of the *regulatory control period*, a further *pricing proposal* (an "annual *pricing proposal*') for the relevant *regulatory year*.

(b) A *pricing proposal* must:

(1) set out the *tariff classes* that are to apply for the relevant *regulatory year*; and

(2) set out the proposed tariffs for each *tariff class*; and

(3) set out, for each proposed tariff, the *charging parameters* and the elements of service to which each *charging parameter* relates; and

(4) set out, for each *tariff class* related to *standard control services*, the expected weighted average revenue for the relevant *regulatory year* and also for the current *regulatory year*; and

(5) set out the nature of any variation or adjustment to the tariff that could occur during the course of the *regulatory year* and the basis on which it could occur; and

(5A) in the case of a NSW Distribution Network Service Provider – set out the amount paid, or required by an order under the Energy and

Utilities Administration Act 1987 of New South Wales to be paid, by the provider to the Climate Change Fund in or in respect of the relevant *regulatory year* and reflect that amount in the expected revenue for the relevant *regulatory year*; and

(6) set out how charges incurred by the *Distribution Network Service Provider* for *transmission use of system services* are to be passed on to customers and any adjustments to tariffs resulting from over or under recovery of those charges in the previous *regulatory year*; and

(7) demonstrate compliance with the *Rules* and any applicable distribution determination; and

(8) describe the nature and extent of change from the previous *regulatory year* and demonstrate that the changes comply with the *Rules* and any applicable distribution determination.

(c) The *AER* must on receipt of a *pricing proposal* from a *Distribution Network Service Provider publish* the proposal.

6.18.3 Tariff classes

(a) A *pricing proposal* must define the *tariff classes* into which customers for *direct control services* are divided.

(b) Each customer for *direct control services* must be a member of 1 or more *tariff classes*.

(c) Separate *tariff classes* must be constituted for customers to whom *standard control services* are supplied and customers to whom *alternative control services* are supplied (but a customer for both *standard control services* and *alternative control services* may be a member of 2 or more *tariff classes*).

(d) A *tariff class* must be constituted with regard to:

(1) the need to group customers together on an economically efficient basis; and

(2) the need to avoid unnecessary transaction costs.

6.18.4 Principles governing assignment or re-assignment of customers to tariff classes and assessment and review of basis of charging

(a) In formulating provisions of a distribution determination governing the assignment of customers to *tariff classes* or the re-assignment of customers from one *tariff class* to another, the *AER* must have regard to the following principles:

(1) customers should be assigned to *tariff classes* on the basis of one or more of the following factors:

(i) the nature and extent of their usage;

(ii) the nature of their *connection* to the *network*;

(iii) whether remotely-read interval metering or other similar metering technology has been installed at the customer's premises as a result of a *regulatory obligation or requirement*;

(2) customers with a similar *connection* and usage profile should be treated on an equal basis;

(3) however, customers with micro-generation facilities should be treated no less favourably than customers without such facilities but with a similar load profile;

(4) a *Distribution Network Service Provider's* decision to assign a customer to a particular *tariff class*, or to re-assign a customer from one *tariff class* to another should be subject to an effective system of assessment and review.

Note:

If (for example) a customer is assigned (or reassigned) to a tariff class on the basis of the customer's actual or assumed maximum demand, the system of assessment and review should allow for the reassignment of a customer who demonstrates a reduction or increase in maximum demand to a tariff class that is more appropriate to the customer's load profile.

(b) If the *charging parameters* for a particular tariff result in a basis of charge that varies according to the usage or load profile of the customer, a distribution determination must contain provisions for an effective system of assessment and review of the basis on which a customer is charged.

6.18.5 Pricing principles

(a) For each *tariff class*, the revenue expected to be recovered should lie on or between:

(1) an upper bound representing the stand alone cost of serving the customers who belong to that class; and

(2) a lower bound representing the avoidable cost of not serving those customers.

(b) A tariff, and if it consists of 2 or more *charging parameters*, each *charging parameter* for a *tariff class*:

(1) must take into account the long run marginal cost for the service or, in the case of a *charging parameter*, for the element of the service to which the *charging parameter* relates; and

(2) must be determined having regard to:

(i) transaction costs associated with the tariff or each *charging parameter*; and

(ii) whether customers of the relevant *tariff class* are able or likely to respond to price signals.

(c) If, however, as a result of the operation of paragraph (b), the *Distribution Network Service Provider* may not recover the expected revenue, the provider must adjust its tariffs so as to ensure recovery of expected revenue with minimum distortion to efficient patterns of consumption.

6.18.6 Side constraints on tariffs for standard control services

(a) This clause applies only to *tariff classes* related to the provision of *standard control services*.

(b) The expected weighted average revenue to be raised from a *tariff class* for a particular *regulatory year* of a *regulatory control period* must not exceed the corresponding expected weighted average revenue for the preceding *regulatory year* by more than the permissible percentage.

(c) The permissible percentage is the greater of the following:

(1) the CPI-X limitation on any increase in the *Distribution Network Service Provider*'s expected weighted average revenue between the two *regulatory year*s plus 2%;

Note:

The calculation is of the form (1 + CPI)(1 – X)(1 + 2%)

(2) CPI plus 2%.

Note:

The calculation is of the form (1 + CPI)(1 + 2%)

(d) In deciding whether the permissible percentage has been exceeded in a particular *regulatory year*, the following are to be disregarded:

(1) the recovery of revenue to accommodate a variation to the distribution determination under rule 6.6 or 6.13;

(2) the recovery of revenue to accommodate pass through of charges for *transmission use of system services* to customers.

(e) This clause does not, however, limit the extent a tariff for customers with remotely-read interval metering or other similar metering technology may vary according to the time or other circumstances of the customer's usage.

6.18.7 Recovery of charges for transmission use of system services

(a) A *pricing proposal* must provide for tariffs designed to pass on to customers the charges to be incurred by the *Distribution Network Service Provider* for *transmission use of system services*.

(b) The amount to be passed on to customers for a particular *regulatory year* must not exceed the estimated amount of the *transmission use of system* charges for the relevant *regulatory year* adjusted for over or under recovery in the previous *regulatory year*.

(c) The extent of the over or under recovery is the difference between:

(1) the amount actually paid by the *Distribution Network Service Provider* by way of *transmission use of system* charges in the previous *regulatory year*; and

(2) the amount passed on to customers by way of *transmission use of system* charges by the *Distribution Network Service Provider* in the previous *regulatory year*.

6.18.8 Approval of pricing proposal

(a) The *AER* must approve a *pricing proposal* if the *AER* is satisfied that:

(1) the proposal complies with this Part and any applicable distribution determination; and

(2) all forecasts associated with the proposal are reasonable.

(b) If the *AER* determines that a *pricing proposal* is deficient:

(1) the *AER* may require the *Distribution Network Service Provider*, within 10 *business days* after receiving notice of the determination, to re-submit the proposal with the amendments necessary to correct the deficiencies identified in the determination and (unless the *AER* permits further amendment) no further amendment; or

(2) the *AER* may itself make the amendments necessary to correct the deficiencies.

(c) If the service provider fails to comply with a requirement under paragraph (b), or the resubmitted proposal fails to correct the deficiencies in the former proposal, the *AER* may itself amend the proposal to bring it into conformity with the requirements of this Part and any applicable distribution determination.

(d) An *approved pricing proposal* takes effect:

(1) in the case of an initial *pricing proposal* – at the commencement of the first *regulatory year* of the *regulatory control period* for which the distribution determination is made; and

(2) in the case of an annual *pricing proposal* – at the commencement of the *regulatory year* to which the proposal relates.

Note:

The operation of this paragraph may, in some instances, be displaced or modified by clause 6.11.3(b).

6.18.9 Publication of information about tariffs and tariff classes

(a) A *Distribution Network Service Provider* must maintain on its website:

(1) a statement of the provider's *tariff classes* and the tariffs applicable to each class; and

(2) for each tariff – the *charging parameters* and the elements of the service to which each *charging parameter* relates; and

(3) a statement of expected price trends (to be updated for each *regulatory year*) giving an indication of how the *Distribution Network Service Provider* expects prices to change over the *regulatory control period* and the reasons for the expected changes.

(b) The information for a particular *regulatory year* must, if practicable, be posted on the website 20 *business days* before the commencement of the relevant *regulatory year* and, if that is not practicable, as soon as practicable thereafter.

6.19. Data Required for Distribution Service Pricing

6.19.1 Forecast use of networks by Distribution Customers and Embedded Generators

Any information required by *Distribution Network Service Providers* must be provided by *Service Applicants* as part of the *connection* and access requirements set out in Chapter 5.

6.19.2 Confidentiality of distribution network pricing information

(a) Subject to the Law and the *Rules*, all information about a *Service Applicant* or *Distribution Network User* used by *Distribution Network Service Providers* for the purposes of *distribution service* pricing is confidential information.

(b) No requirement in this Chapter 6 to publish information about a *tariff class* is to be construed as requiring publication of information about an individual customer.

Part J Billing and Settlements

6.20 Billing and Settlements Process

This clause describes the manner in which *Distribution Customers* and *Embedded Generators* are billed by *Distribution Network Service Providers* for *distribution services* and how payments for *distribution services* are settled.

6.20.1 Billing for distribution services

(a) A *Distribution Network Service Provider* must bill *Distribution Network Users* for *distribution services* as follows:

(1) *Embedded Generators*:

(i) by applying the *entry charge* as a fixed annual charge to each *Embedded Generator*; and

(ii) by applying any other charge the *Distribution Network Service Provider* makes consistently with these *Rules* and the applicable distribution determination.

(2) *Distribution Customers*:

The charges to *Distribution Customers* must be determined according to use of the *distribution network* as determined in accordance with a *metrology procedure* or, in the absence of a *metrology procedure* allowing such a determination to be made, by *meter* or by agreement between the *Distribution Customer* and the *Distribution Network Service Provider* by applying one or more of the following measures:

(i) demand-based prices to the *Distribution Customer*'s metered or agreed half-hourly demand;

(ii) energy-based prices to the *Distribution Customer*'s metered or agreed energy;

(iii) the *Distribution Customer* charge determined under this clause as a fixed periodic charge to each *Distribution Customer*;

(iv) a fixed periodic charge, a prepayment or other charge determined by agreement with the *Distribution Customer*;

(v) any other measure the *Distribution Network Service Provider* is authorised to apply by the applicable distribution determination.

(b) Subject to paragraph (c), where a *Distribution Customer* (other than a *Market Customer*) incurs *distribution service* charges, the *Distribution Network Service Provider* must bill the *Market Customer* from whom the *Distribution Customer* purchases electricity directly or indirectly for such *distribution services* in accordance with paragraph (a)(2).

(c) If a *Distribution Customer* and the *Market Customer* from whom it purchases electricity agree, the *Distribution Network Service Provider* may bill the *Distribution Customer* directly for *distribution services* used by that *Distribution Customer* in accordance with paragraph (a)(2).

(d) *Distribution Network Service Providers* must:

(1) calculate *transmission service charges* and *distribution service charges* for all connection points in their *distribution network*; and

(2) pay to *Transmission Network Service Providers* the *transmission service charges* incurred in respect of use of a *transmission network* at each *connection point* on the relevant *transmission network*.

(e) Charges for *distribution services* based on metered kW, kWh, kVA, or kVAh for:

(1) *Embedded Generators* that are *Market Generators*; and

(2) *Market Customer*; and

(3) *Second-Tier Customers*;

must be calculated by the *Distribution Network Service Provider* from:

(1) *settlements ready data* obtained from *AEMO's metering database*, for those *Embedded Generators*, *Market Customers* and *Second-Tier Customers* with *connection points* that have a type 1, 2, 3 or 4 *metering installation*; and

(2) *energy data*, in accordance with a *metrology procedure* that allows the *Distribution Network Service Provider* to use *energy data* for this purpose, or otherwise *settlements ready data* obtained from *AEMO's metering database*, for those *Embedded Generators*, *Market*

Customers and *Second-Tier Customers* with *connection points* that have a type 5, 6 or 7 *metering installation*.

(f) Charges for *distribution services* based on metered kW, kWh, kVA or kVAh for:

(1) *Embedded Generators* that are not *Market Generators*; and

(2) *Non-Registered Customers*; and

(3) *franchise customers*,

must be calculated by the *Distribution Network Service Provider* using data that is consistent with the *metering data* used by the relevant *Local Retailer* in determining *energy settlements*.

(g) The *Distribution Network Service Provider* may bill the relevant *Local Retailer* for *distribution services* used by *Non-Registered Customers* and *franchise customers*.

(h) Where the billing for a *Distribution Customer* for a particular *financial year* is based on quantities which are undefined until after the commencement of the *financial year*, charges must be estimated from the previous year's billing quantities with a reconciliation to be made when the actual billing quantities are known.

(i) Where the previous year's billing quantities are unavailable or no longer suitable, nominated quantities may be used as agreed between the parties.

6.20.2 Minimum information to be provided in distribution network service bills

The following is the minimum information that must be provided with a bill for a *network coupling point* issued by a *Distribution Network Service Provider* directly to a *Registered Participant*:

(1) the *network coupling point* identifier; and

(2) the dates on which the billing period starts and ends; and

(3) the identifier of the *distribution service* price from which the *network coupling point* charges are calculated; and

(4) measured quantities, billed quantities, prices and amounts charged for each component of the total *distribution service* account.

6.20.3 Settlement between Distribution Network Service Providers

The billing and settlement process specified in this clause must be applied to all *Distribution Customers* including other *Distribution Network Service Providers*.

6.20.4 Obligation to pay

A *Distribution Network User* must pay *distribution service* charges properly charged to it and billed in accordance with this clause by the due date specified in the bill.

Part K Prudential requirements, capital contributions and prepayments

6.21 Distribution Network Service Provider Prudential Requirements

This clause sets out the arrangements by which *Distribution Network Service Providers* may minimise financial risks associated with investment in *network assets* and provides for adoption of cost-reflective payment options in conjunction with the use of average distribution prices. The clause also prevents *Distribution Network Service Providers* from receiving income twice for the same assets through prudential requirements and *distribution service* prices.

6.21.1 Prudential requirements for distribution network service

(a) A *Distribution Network Service Provider* may require an *Embedded Generator* or *Distribution Customer* that requires a new *connection* or a modification in service for an existing *connection* to establish prudential requirements for *connection service* and/or *distribution use of system service*.

(b) Prudential requirements for *connection service* and/or *distribution use of system service* are a matter for negotiation between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer* and the terms agreed must be set out in the *connection agreement* between the *Distribution Network Service Provider* and the *Embedded Generator* or *Distribution Customer*.

(c) The *connection agreement* may include one or more of the following provisions:

(1) the conditions under which and the time frame within which other *Distribution Network User*s who use that part of the *distribution network* contribute to refunding all or part of the payments;

(2) the conditions under which financial arrangements may be terminated; and

(3) the conditions applying in the event of default by the *Distribution Customer* or *Embedded Generator*.

(d) The prudential requirements may incorporate, but are not limited to, one or more of the following arrangements:

(1) financial capital contributions;

(2) non-cash contributions;

(3) *distribution service* charge prepayments;

(4) guaranteed minimum *distribution service charges* for an agreed period;

(5) guaranteed minimum *distribution service* quantities for an agreed period;

(6) provision for financial guarantees for *distribution service charges*.

6.21.2 Capital contributions, prepayments and financial guarantees

Despite any other provision in this Chapter, in relation to capital contributions, prepayments and financial guarantees:

(1) the *Distribution Network Service Provider* is not entitled to recover, under a mechanism for the economic regulation of *direct control services*, any component representing asset related costs for assets provided by *Distribution Network User*s; and

(2) the *Distribution Network Service Provider* may receive a capital contribution, prepayment and/or financial guarantee up to the provider's future revenue related to the provision of *direct control services* for any new assets installed as part of a new *connection* or modification to an existing *connection*, including any *augmentation* to the *distribution network*; and

(3) where assets have been the subject of a contribution or prepayment, the *Distribution Network Service Provider* must amend the provider's revenue related to the provision of *direct control services*.

6.21.3 Treatment of past prepayments and capital contributions

(a) Payments made by *Distribution Customers* and *Embedded Generators* for *distribution service* prior to 13 December 1998 must be made in accordance with any contractual arrangements with the relevant *Distribution Network Service Providers* applicable at that time.

(b) Where contractual arrangements referred to in clause 6.22.2(a) are not in place, past *distribution service* prepayments or capital contributions may be incorporated in the capital structure of the *Distribution Network Service Provider*'s business.

(c) The *AER* may intervene in and resolve any dispute under this clause which cannot be resolved between the relevant *Distribution Network Service Provider* and *Distribution Customer* or *Embedded Generator*.

6.21.4 Application of IPART and ICRC guidelines regarding capital contribution charges

(a) Capital contribution charges by the NSW Distribution Network Service Providers in respect of the regulatory control period 2009-2014 are to be determined in accordance with Determination No 1 2002 made by the IPART under section 11(3) of the Independent Pricing and Regulatory Act 1992 (NSW) in 2002.

(b) Capital contribution charges by the ACT Distribution Network Service Provider in respect of the regulatory control period 2009-2014 are to be determined in accordance with the Electricity Network Capital Contributions Code made by the ICRC in 2001.

Part L Dispute resolution

6.22 Dispute Resolution

6.22.1 Dispute Resolution by the AER

(a) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* as to the *terms and conditions of access* to a *direct control service* or to a *negotiated distribution service* is an access dispute for the purposes of Part 10 of the Law.

(b) A dispute between a *Distribution Network Service Provider* and a *Service Applicant* about *access charges* is an access dispute for the purposes of Part 10 of the Law.

(c) A dispute between a *Distribution Network Service Provider* and a *Connection Applicant* about matters referred to in clause 5.5(f) or clause 5.5(h) is an access dispute for the purposes of Part 10 of the Law.

6.22.2 Determination of dispute

(a) In determining an access dispute about *terms and conditions of access* to a *direct control service* (other than a negotiable component), the *AER* must apply:

(1) in relation to price, the *Distribution Network Service Provider*'s *approved pricing proposal* or (in the case of an EnergyAustralia prescribed (transmission) standard control service) EnergyAustralia's approved pricing methodology, as the case requires; and

(2) in relation to other terms and conditions, Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules* and any other *applicable regulatory instrument*; and

(3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*.

(a1) In determining an access dispute about *terms and conditions of access* to a negotiable component of a *direct control service*, the *AER* must apply:

(1) in relation to price (including *access charges*), the negotiable component criteria that are applicable to the dispute in accordance with the relevant distribution determination; and

(2) in relation to other terms and conditions, the negotiable component criteria that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and

(3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

(4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.

(b) In determining an access dispute about the *terms and conditions of access* to a *direct control service* (including a negotiable component), the *AER* may:

(1) have regard to other matters the *AER* considers relevant; and

(2) hear evidence or receive submissions from *AEMO* about *power system security* and from *Distribution Network User*s who may be adversely affected.

Note:

Section 130 of the Law requires the AER, in making an access determination, to give effect to a network revenue or pricing determination

applicable to the services that are the subject of the dispute even though the determination may not have been in force when the dispute arose.

(c) In determining an access dispute about *terms and conditions of access* to a *negotiated distribution service*, the *AER* must apply:

(1) in relation to price (including *access charges*), the *Negotiated Distribution Service Criteria* that are applicable to the dispute in accordance with the relevant distribution determination; and

(2) in relation to other terms and conditions, the *Negotiated Distribution Service Criteria* that are applicable to the dispute and Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*; and

(3) in relation to all *terms and conditions of access* (including price) the decisions of *AEMO* or the *AER* where those decisions relate to those terms and conditions and are made under Chapters 4, 5, this Chapter 6 and Chapter 7 of the *Rules*;

and must have regard:

(4) to the relevant *negotiating framework* prepared by the *Distribution Network Service Provider* and approved by the *AER*.

(d) In determining an access dispute about the *terms and conditions of access* to a *negotiated distribution service*, the *AER* may:

(1) have regard to other matters the *AER* considers relevant; and

(2) hear evidence or receive submissions from *AEMO* and *Distribution Network Users* notified and consulted under the *Distribution Network Service Provider*'s *negotiating framework*.

(e) In determining an access dispute about *access charges*, or involving *access charges*, the *AER* must give effect to the following principle:

Access charges should be based on the costs reasonably incurred by the *Distribution Network Service Provider* in providing *distribution network user access* and, where they consist of compensation referred to in clause 5.5(f)(4)(ii) and (iii), on the revenue that is likely to be foregone and the costs that are likely to be incurred by a person referred to in those provisions where an event referred to in those provisions occurs.

6.22.3 Termination of access dispute without access determination

(a) If the *AER* considers that an access dispute could be effectively resolved by some means other than an access determination, the *AER* may give the

parties to the dispute notice of the alternative means of resolving the dispute.

Example:

The AER might give such a notice if of the opinion that a particular dispute could be dealt with more efficiently, and with less expense, by a jurisdictional ombudsman.

(b) The giving of such a notice is a specified dispute termination circumstance for the purposes of section 131(3) of the Law.

Note:

It follows that the AER may exercise its power to terminate the dispute without making an access determination (See section 131(1)(d) of the Law).

Part M Separate disclosure of transmission and distribution charges

6.23 Separate disclosure of transmission and distribution charges

(a) A *Distribution Customer*:

(1) with a *load* greater than 10MW or 40GWh per annum; or

(2) with *metering* equipment capable of capturing relevant *transmission* and *distribution system* usage data,

may make a request (a ***TUOS/DUOS disclosure request***) to a *Distribution Network Service Provider* to provide the *Distribution Customer* with a statement (a ***TUOS/DUOS disclosure statement***) identifying the separate components of the *transmission use of system* and *distribution use of system* charges comprised in the charges for electricity supplied to the *Distribution Customer's connection points*.

(b) Within 10 *business days* of receipt of a *TUOS/DUOS disclosure request*, a *Distribution Network Service Provider* must notify the *Distribution Customer* of the estimated charge (including details of how the charge is calculated) for providing the *TUOS/DUOS disclosure statement*. The charge must be no greater than the reasonable costs directly incurred by the *Distribution Network Service Provider* in preparing the statement for the *Distribution Customer*.

(c) If the *Distribution Customer* advises the *Distribution Network Service Provider* within 20 *business days* of receipt of the notice referred to in paragraph (b) that it still requires the requested *TUOS/DUOS disclosure statement*, the *Distribution Network Service Provider* must prepare the

statement and provide it to the *Distribution Customer* within 20 *business days* of being so advised. The *TUOS/DUOS disclosure statement* must include detailed information on the method used to determine the *distribution use of system* charges and the allocation of the *transmission use of system* charges to the *Distribution Customer* for electricity supplied to its *connection points*. The information must be sufficient to allow the *Distribution Customer* to assess the impact on its *network* charges of a change in its *network* use.

(d) The *TUOS/DUOS disclosure statement* must also separately identify the amounts that have been allocated to the *Distribution Customer's connection points* under Part J of Chapter 6A in respect of each of the *categories of prescribed transmission services*, where the *Distribution Customer* requests this information.

(e) Where the *Distribution Customer* requests the information referred to in paragraph (d), the *Distribution Network Service Provider* must separately identify the component of the charge notified under paragraph (b) that relates to the provision of the additional information.

(f) Each *Distribution Network Service Provider* must publish information annually disclosing the *transmission use of system* and *distribution use of system* charges for each of the classes of *Distribution Customers* identified for this purpose by the *Distribution Network Service Provider*, or as required by the *AER*.

Schedule 6.1 Contents of building block proposals

S6.1.1 Information and matters relating to capital expenditure

A *building block proposal* must contain at least the following information and matters relating to capital expenditure:

(1) a forecast of the required capital expenditure that complies with the requirements of clause 6.5.7 of the *Rules* and identifies the forecast capital expenditure by reference to well accepted categories such as:

(i) asset class (eg. *distribution lines*, *substations* etc); or

(ii) category driver (eg. *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, business support etc),

and identifies, in respect of proposed material assets:

(iii) the location of the proposed asset; and

(iv) the anticipated or known cost of the proposed asset; and

(v) the categories of *distribution services* which are to be provided by the proposed asset;

(2) the method used for developing the capital expenditure forecast;

(3) the forecasts of load growth relied upon to derive the capital expenditure forecasts and the method used for developing those forecasts of load growth;

(4) the key assumptions that underlie the capital expenditure forecast;

(5) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;

(6) capital expenditure for each of the past *regulatory year*s of the previous and current *regulatory control period*, and the expected capital expenditure for each of the last two *regulatory year*s of the current *regulatory control period*, categorised in the same way as for the capital expenditure forecast;

(7) an explanation of any significant variations in the forecast capital expenditure from historical capital expenditure.

S6.1.2 Information and matters relating to operating expenditure

A *building block proposal* must contain at least the following information and matters relating to operating expenditure:

(1) a forecast of the required operating expenditure that complies with the requirements of clause 6.5.6 of the *Rules* and identifies the forecast operating expenditure by reference to well accepted categories such as:

(i) particular programs; or

(ii) types of operating expenditure (eg. maintenance, payroll, materials etc),

and identifies in respect of each such category:

(iii) to what extent that forecast expenditure is on costs that are fixed and to what extent it is on costs that are variable; and

(iv) the categories of *distribution services* to which that forecast expenditure relates;

(2) the method used for developing the operating expenditure forecast;

(3) the forecasts of key variables relied upon to derive the operating expenditure forecast and the method used for developing those forecasts of key variables;

(4) the method used for determining the cost associated with planned maintenance programs designed to improve the performance of the relevant *distribution system* for the purposes of any *service target performance incentive scheme* that is to apply to the *Distribution Network Service Provider* in respect of the relevant *regulatory control period*;

(5) the key assumptions that underlie the operating expenditure forecast;

(6) a certification of the reasonableness of the key assumptions by the directors of the *Distribution Network Service Provider*;

(7) operating expenditure for each of the past *regulatory year*s of the previous and current *regulatory control period*, and the expected operating expenditure for each of the last two *regulatory year*s of the current *regulatory control period*, categorised in the same way as for the operating expenditure forecast;

(8) an explanation of any significant variations in the forecast operating expenditure from historical operating expenditure.

S6.1.3 Additional information and matters

A *building block proposal* must contain at least the following additional information and matters:

(1) an identification and explanation of any significant interactions between the forecast capital expenditure and forecast operating expenditure programs;

(2) a proposed pass through clause with a proposal as to the events that should be defined as *pass through events*;

(3) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *efficiency benefit sharing scheme* should apply for the relevant *regulatory control period*;

(4) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *service target performance incentive scheme* should apply for the relevant *regulatory control period*;

(5) a description, including relevant explanatory material, of how the *Distribution Network Service Provider* proposes the *demand management incentive scheme* (if applicable) should apply for the relevant *regulatory control period*;

(6) the provider's calculation of revenues or prices for the purposes of the control mechanism proposed by the provider together with:

(i) details of all amounts, values and inputs (including X factors) relevant to the calculation; and

(ii) an explanation of the calculation and the amounts, values and inputs involved in the calculation; and

(iii) a demonstration that the calculation and the amounts, values and inputs on which it is based comply with relevant requirements of the Law and the *Rules*;

(7) the provider's calculation of the regulatory asset base for the relevant *distribution system* for each *regulatory year* of the relevant *regulatory control period* using the *roll forward model* referred to in clause 6.5.1 of transitional Chapter 6, together with:

(i) details of all amounts, values and other inputs used by the provider for that purpose; and

(ii) a demonstration that any such amounts, values and other inputs comply with the relevant requirements of Part C of transitional Chapter 6; and

(iii) an explanation of the calculation of the regulatory asset base for each *regulatory year* of the relevant *regulatory control period* and of the amounts, values and inputs referred to in subparagraph (i);

(8) the commencement and length of the period nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.2(c)(2) of transitional Chapter 6;

(9) the provider's calculation of the proposed rate of return;

(10) the *post-tax revenue model* completed to show its application to the *Distribution Network Service Provider* and the completed *roll-forward model*;

(11) the provider's estimate of the cost of corporate income tax for each *regulatory year* of the *regulatory control period*;

(12) the depreciation schedules nominated by the *Distribution Network Service Provider* for the purposes of clause 6.5.5 of transitional Chapter 6, which categorise the relevant assets for these purposes by reference to well accepted categories such as:

(i) asset class (eg *distribution lines* and *substation*s); or

(ii) category driver (eg *regulatory obligation or requirement*, replacement, *reliability*, net market benefit, and business support),

together with:

(iii) details of all amounts, values and other inputs used by the provider to compile those depreciation schedules; and

(iv) a demonstration that those depreciation schedules conform with the requirements set out in clause 6.5.5(b) of transitional Chapter 6; and

(v) an explanation of the calculation of the amounts, values and inputs referred to in subparagraph (iii);

(13) *****

Schedule 6.2 Regulatory Asset Base

S6.2.1 Establishment of opening regulatory asset base for a regulatory control period

(a) Application of this clause

This clause S6.2.1:

(1) applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory control period* from the previous *regulatory control period*; and

(2) also applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of a *regulatory control period* where the *distribution system* was not immediately before that time the subject of a *building block determination*.

(b) Roll forward model to comply with this clause

The values to be used for completing the *roll forward model* must be established in accordance with this clause and clauses S6.2.2 and S6.2.3.

(c) Distribution systems of specific providers

(1) In the case of a *distribution system* owned, controlled or operated by one of the following *Distribution Network Service Providers* as at the commencement of this schedule, the value of the regulatory asset base for that *distribution system* as at the beginning of that first *regulatory year* must be determined by rolling forward the regulatory asset base for that *distribution system*, as set out in the table below, in accordance with this schedule:

Jurisdiction	*Distribution Network Service Provider*	Regulatory Asset Base ($m)
Australian Capital Territory	ActewAGL	510.54 (as at 1 July 2004 in July 2004 dollars)
New South Wales	Country Energy	2,440 (as at 1 July 2004 in July 2004 dollars)
	EnergyAustralia	4,116 (as at 1 July 2004 in July 2004 dollars); plus 635.6 (as at 1 July 2004 in July 2004 dollars) in respect of EnergyAustralia's transmission support network
	Integral Energy	2,283 (as at 1 July 2004 in July 2004 dollars)
*****	*****	*****

(2) The values in the table above are to be adjusted for the difference between:

(i) any estimated capital expenditure that is included in those values for any part of a previous *regulatory control period*; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(3) When rolling forward a regulatory asset base under subparagraph (1), the *AER* must take into account the derivation of the values in the

above table from past regulatory decisions and the consequent fact that they relate only to the regulatory asset base identified in those decisions.

(d) *****

(e) Method of adjustment of value of regulatory asset base

Except as otherwise provided in paragraph (c), the value of the regulatory asset base for a *distribution system* as at the beginning of the first *regulatory year* of a *regulatory control period* must be calculated by adjusting the value (the '**previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the first *regulatory year* of the immediately preceding *regulatory control period* (the '**previous control period**') as follows:

(1) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be increased by the amount of all capital expenditure incurred during the previous control period.

(1A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be increased by the amount of the capital expenditure incurred during the previous control period that is to be included under the ICRC approach referred to in clause 6.5.1(g) of the transitional Chapter 6.

(2) The previous value of the regulatory asset base must be increased by the amount of the estimated capital expenditure approved by the *AER* for any part of the previous control period for which actual capital expenditure is not available.

(3) The previous value of the regulatory asset base must be adjusted for the difference between:

(i) the estimated capital expenditure for any part of a previous *regulatory control period* where that estimated capital expenditure has been included in that value; and

(ii) the actual capital expenditure for that part of the previous *regulatory control period*.

This adjustment must also remove any benefit or penalty associated with any difference between the estimated and actual capital expenditure.

(4) The previous value of the regulatory asset base must only be increased by actual or estimated capital expenditure to the extent that all such capital expenditure is properly allocated to the provision of *standard*

control services in accordance with the Cost Allocation Method for the relevant *Distribution Network Service Provider*.

(5) The previous value of the regulatory asset base for each NSW Distribution Network Service Provider must be reduced by the amount of actual depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the rates and methodologies allowed in the distribution determination for that period.

(5A) The previous value of the regulatory asset base for the ACT Distribution Network Service Provider must be reduced by the amount of depreciation of the regulatory asset base during the previous *regulatory control period*, calculated in accordance with the distribution determination for that period.

(6) The previous value of the regulatory asset base must be reduced by the disposal value of any asset where that asset has been disposed of during the previous *regulatory control period*.

(7) The previous value of the regulatory asset base must be reduced by the value of an asset where the asset was previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but, as a result of a change to the classification of a particular service under Part B, is not to be used for that purpose for the relevant *regulatory control period*.

(8) The previous value of the regulatory asset base may be increased by the value of an asset to which this subparagraph applies to the extent that:

(i) the *AER* considers the asset to be reasonably required to achieve one or more of the *capital expenditure objectives*; and

(ii) the asset is properly allocated to *standard control services* in accordance with the principles and policies set out in the Cost Allocation Method for the relevant *Distribution Network Service Provider*; and

(iii) the value of the asset has not been otherwise recovered.

This subparagraph applies to an asset that:

(i) was not used to provide *standard control services* (or their equivalent under the previous regulatory system) in the previous *regulatory control period* but, as a result of a change to the classification of a particular service under Part B, is to be used for that purpose for the relevant *regulatory control period*; or

(ii) was never previously used to provide *standard control services* (or their equivalent under the previous regulatory system) but is to be used for that purpose for the relevant *regulatory control period.*

(f) An increase or reduction in the value of the regulatory asset base under subparagraph (7) or (8) of paragraph (e) is to be based on the value of the relevant asset as shown in independently audited and published accounts.

(g) Despite any other provision of this clause S6.2.1, the regulatory asset base for Country Energy at the beginning of the regulatory control period 2009-2014 should reflect the deferral of depreciation allowed for Country Energy in clause 7.3.2 of the IPART's Final Report (Other Paper No 23 - June 2004) relating to NSW Electricity Distribution Pricing 2004/05 to 2008/09.

S6.2.2 *****

S6.2.3 Roll forward of regulatory asset base within the same regulatory control period

(a) Application of this clause

This clause applies to the establishment of the value of the regulatory asset base for a *distribution system* as at the beginning of one *regulatory year* in a *regulatory control period* on the roll forward of the regulatory asset base to that *regulatory year* from the immediately preceding *regulatory year* (if any) in that *regulatory control period*.

(b) Roll forward model to comply with this clause

The *roll forward model* referred to in clause 6.5.1 of the *Rules* must provide for that value to be established in accordance with the requirements of this clause.

(c) Method of adjustment of value of regulatory asset base

The value of the regulatory asset base for a *distribution system* as at the beginning of the second or a subsequent year ('the **later year**') in a *regulatory control period* must be calculated by adjusting the value ('the **previous value**') of the regulatory asset base for that *distribution system* as at the beginning of the immediately preceding *regulatory year* ('the **previous year**') in that *regulatory control period* as follows:

(1) The previous value of the regulatory asset base must be increased by the amount of forecast capital expenditure accepted or substituted by the *AER* for the previous year in accordance with clause 6.5.7(c) or clause 6.12.1(3) (as the case may be).

(2) The previous value of the regulatory asset base must be reduced by the amount of depreciation included in the *Distribution Network Service Provider*'s *annual revenue requirement* for the previous year.

(3) The previous value of the regulatory asset base must be reduced by the disposal value of any asset included in that value where the asset is forecast to be disposed of during the previous year.

(4) The previous value of the regulatory asset base must be increased by an amount necessary to maintain the real value of the regulatory asset base as at the beginning of the later year by adjusting that value for inflation.

(d) Allowance for working capital

If the *AER* determines that it is appropriate to do so, it may include an allowance for working capital in the regulatory asset base for a *distribution system* which is rolled forward in accordance with this clause.